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Y4.F76/1:N88/3/985

THIRD REVIEW CONFERENCE OF THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS

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HEARING

BEFORE THE

SUBCOMMITTEES ON ARMS CONTROL,
INTERNATIONAL SECURITY AND SCIENCE

AND ON

INTERNATIONAL ECONOMIC POLICY AND TRADE

OF THE

COMMITTEE ON FOREIGN AFFAIRS
HOUSE OF REPRESENTATIVES

NINETY-NINTH CONGRESS

FIRST SESSION

AUGUST 1, 1985

Printed for the use of the Committee on Foreign Affairs

60-028 O

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1986

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

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THIRD REVIEW CONFERENCE OF THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS

THURSDAY, AUGUST 1, 1985

House of Representatives, Committee on Foreign Affairs, Subcommittees on Arms Control, International Security, and Science, and on International Economic Policy and Trade,

Washington, DC.

The subcommittees met at 10:30 a.m., in room 2172, Rayburn House Office Building, Hon. Don Bonker (chairman of the Subcommittee on International Economic Policy and Trade) presiding.

Mr. **Bonker**. The subcommittees will come to order.

The Subcommittee on Arms Control, International Security and Science, and also the subcommittee I chair on International Economic Policy and Trade are jointly conducting this hearing today.

Our purpose is to review the preparations that are being made by the U.S. Delegation for the Third Review Conference of the Treaty of the Non-Proliferation of Nuclear Weapons, which I understand will be held in September.

The Non-Proliferation Treaty is the basic document which underpins international norms against the spread of nuclear weapons, and it provides a foundation for transfers of peaceful nuclear technology.

This treaty is so basic and so fundamental to the maintenance of international order that its importance is often overlooked. Given the paradoxical nature of man's knowledge regarding nuclear energy, nations could not use nuclear energy for peaceful purposes absent the Code of International Conduct that is established in the treaty.

And despite its imperfections, and we'll be hearing about them, the NPT does provide the basis according to which any legitimate international transactions in the nuclear energy field are undertaken.

Now, related to the topic of the treaty is a proposal for a comprehensive treaty banning nuclear testing, which nonnuclear weapons states have identified as the single most important arms control measure relating to article VI of the treaty.

That article commits all parties to the NPT to pursue negotiations to stop the nuclear arms race at an early date. I am pleased to be cosponsor of House Joint Resolution 3, which calls on the President to resume CTB negotiations as soon as possible.

This legislation is also sponsored by the chairman of the other subcommittee, Dante Fascell.

This morning we will hear from two panels who will be commenting on these issues. One consists of the administration representatives, and that is Honorable Richard Kennedy, who testified before the committee yesterday on our bilateral nuclear agreement with the People's Republic of China, and accompanying him will be the Honorable Lewis Dunn. He represents the Arms Control and Disarmament Agency.

We also have private witnesses who will be testifying who are now at the witness table: Joseph Nye, Jr., who is the director, the Center for Science and International Affairs at Harvard University; and Leonard Spector, the Carnegie Endowment for International Peace; and then Eric Fersht, who is here representing Greenpeace today.

So, I think we will proceed in that order.

Mr. Nye, I haven't seen you since the Wye Plantation session of a few months ago. I trust you will have some valuable things to say to the committee this morning.

Welcome.

STATEMENT OF JOSEPH S. NYE, JR., DIRECTOR, CENTER FOR SCIENCE AND INTERNATIONAL AFFAIRS, HARVARD UNIVERSITY

Mr. Nye. Thank you, Mr. Chairman.

I would like to bring to light a rather interesting conjunction to start my comments, that the Non-Proliferation Review Conference and the fortieth anniversary of the bombing of Hiroshima are starting in the same month.

And that points out a very fundamental paradox, which is the fact that deterrence seems to have worked for 40 years. We are about to set a record, if you like, in history, of long-term peaceful relations between major powers.

Indeed, it has sometimes been said that nuclear weapons have produced a crystal ball effect—any political leader contemplating war can look into this crystal ball, see the outcome, and realize how foolish it would be.

Now, the paradox is the following: If that is true, if nuclear weapons have such a crystal ball effect, then why should we stand for keeping them from other countries?

Why shouldn't we generalize this situation of deterrence?

Indeed, we are often accused, and we will hear it in Geneva at the Review Conference, of being "discriminatory" or "hypocritical," or perhaps even "racist."

DANGERS OF PROLIFERATION

The argument is sometimes made by respectable scholars that the spread of nuclear weapons would be "helpful" not "hurtful" for international stability. Prof. Kenneth Waltz at Berkeley has written on this point.

We have to think carefully about how we answer such arguments. Is there an impartial way in which in we can say that these arguments are wrong without being hypocritical? I believe the answer to that is, "Yes, we do have good arguments."

The arguments made by people like Kenneth Waltz might be true if the conditions in the various regions where nuclear weapons would spread were the same as the conditions in the United States-Soviet relationship. But they are not. And the key differences are in the ability to command and control the weapons, both politically and technically.

Politically, if you look at statistics of coups, of governments overthrown, of political instability, one can see that the areas where nuclear weapons would spread—such as the Middle East—are far more prone to political disruption. Moreover—technically the new weapons which would be introduced would be much less likely to have the various permissive action links, electronic combination locks which prevent their unauthorized use.

In addition, there is a great temptation for preemption when nuclear weapons are few and vulnerable. If one looks at the bombing of the Iraq reactor by Israel and of the Iranian reactor by Iraq, one can imagine some of the consequences of the introduction of nuclear weapons into regions of great political instability.

So, while it sounds as though preventing the spread of nuclear weapons is discriminatory, in fact, it is based on quite solid grounds, and that we can have a good, impartial, nondiscriminatory argument for opposing proliferation.

But it does raise some interesting problems, which we are bound to hear more of, both at the Non-Proliferation Treaty Review Conference, and, indeed, in this Congress, about the relationship between nonproliferation and arms control, more generally.

IMPORTANCE OF NPT BEYOND ARTICLE VI

Usually, it is argued that the Non-Proliferation Treaty rests on article VI, and it is argued that article VI commits the great powers to stopping vertical proliferation and commits them toward negotiations on disarmament.

But in a way that is too simple a presentation.

The Non-Proliferation Treaty rests on much more than article VI. It also rests on a local security bargain between states that are in regions of turmoil. It rests on countries' self-interest in making sure that if they forgo nuclear weapons that their neighbors forgo them as well, and that there be international inspectors who come in to make sure that is the case. Even if there were not an article VI in the Treaty, there would still be a firm security basis for preserving the treaty.

PARADOXICAL NATURE OF ARTICLE VI

So, as we discuss article VI, we want to keep it in proportion. It is also worth remembering that when we talk about our obligations under article VI, that there is a further paradox. One of the reasons that nuclear weapons have not spread to the 25 states that President Kennedy thought would have them by now, is the fact that the nuclear superpowers, the United States and the Soviet Union, have spread an umbrella giving nuclear guarantees to allied states.

Many countries in Europe, both East and West, which would be politically and technically capable of forming or making nuclear weapons have not done so because they have been sheltered by the nuclear umbrella that comes, in our case, under the NATO alliance.

If one were to read article VI as requiring disarmament or something which severely shook their confidence in our deterrent protection, one might see more proliferation, not less.

In other words, there is another paradox here. An interpretation of article VI which severely shook the grounds of deterrence and weakened these alliances could actually foster proliferation rather than stop it.

NPT AND ARMS CONTROL

Now, with that said about the complexities of the article VI argument, let me say that, on the other hand, article VI is an important part of the treaty. When one realizes that the whole treaty comes up, not for review, but for renewal, in 10 years' time, it behooves us to take article VI more seriously than we have been in the past.

Now, how should we handle it?

Let me say that there are two extreme positions that we should be avoiding. One is to see the NPT as a lever to move superpower arms control, and, by a lever, I mean the threats to withdraw from the treaty or amend the treaty unless a comprehensive test ban is signed or some other arms control procedure is followed.

The thing that worries me about such threats—and there were hints of them in some of the early preparations for the review conference, is that they are a little bit like amputating one's foot to cure a hangnail. You get rid of the hangnail but you also get rid of the foot.

I suspect in this case we might certainly raise concern in the superpowers about arms control, but we would lose the Non-Proliferation Treaty as well. Alternatively, one can use the metaphor of trying to move a large rock with a small lever. The net effect is you are likely to break the lever and the rock remains in place.

CTB IMPACT ON ARMS CONTROL

Now that brings me to the specific question of the CTB. I do not believe the CTB is the key to arms control. It has become symbolically an important issue at the review conference, but if you ask me is this the most important of the various issues on the arms control agenda? My answer to that, frankly, would be, "No."

Indeed, in a book prepared at the Harvard Kennedy School on how to avoid nuclear war, which has been recently published under the title of "Hawks, Doves, and Owls." We looked at the various ways in which nuclear war might start, and the various measures which might reduce the probabilities of nuclear war. We did not find a CTB near the top of our agenda. For example, far more important is how space issues would be dealt with, including the strategic defense initiative in the context of the talks in Geneva.

That means that, while I do not oppose the CTB, I do not regard it as the top item on the agenda. Indeed, I would think a more sensible way to approach the article VI issue would be to continue the current arms talks in Geneva, and in relation to the CTB to ratify the Threshold Test Ban Treaty and then engage in talks in which we might have percentage reductions of the threshold over a decade to see whether at that point we would have the conditions which would permit a full CTB.

I support the House resolution in favor of reentering CTB negotiations. I think it is important to ratify the existing treaties, but I worry a little bit about making the CTB the be-all and end-all of compliance with article VI because I think it might come back and haunt us.

IMPORTANCE OF NPT PRESERVATION

The other extreme position I would like to warn against is the opposite view of how to treat this linkage between general arms control and article VI, and that is to say, "Well, let the NPT expire if it must."

There are some people who say the United States-Soviet relationship is so important, the strategic relationship so critical that we shouldn't let a minor issue—in their view—like proliferation, stand in the way of the measures which we think we must take in our strategic modernization. If, in 1995, it turns out that we can't keep the treaty, so be it. Too bad!

These people often point to the flaws of the treaty. They will point to the fact that after 90 days, a state can withdraw, so that a Libya or Iraq, which are parties to the treaty, can develop the technology they want and then 90 days later say that supreme national interest has made them change their mind.

Now, there is some merit in this, but not much. In a world of sovereign states, in which each has the right to self-defense, the burden of proof under the current system is against the proliferator; and that is something of remarkable importance for our ability to stem the spread of nuclear weapons.

The Non-Proliferation Treaty is a necessary, if not a sufficient condition for an effective nonproliferation policy. Obviously policy also requires a number of other measures: effective bilateral diplomacy; sanctions against the next states that proliferates; cooperation among supplier states, including new states entering the supplier area—which I would say parenthetically is one of the reasons why I would support the China agreement that your committee heard about yesterday. We have to see the Non-Proliferation Treaty as only part of an effective policy, but it is an absolutely essential part. It would be much harder to carry up those other components of a policy in the absence of a nonproliferation treaty.

I would like to warn against either of those two extreme positions of too tight a linkage between article VI of the NPT with the other arms control agenda, or ignoring the linkage altogether.

Essentially, we have to thread our way through that middle space.

To return to the conclusions of the book I mentioned—"Hawks, Doves, and Owls"—one of the things that was among the top 10 issues, as we looked at the issue of how might a nuclear war start, was proliferation. Among the top measures we recommended were steps to strengthen our nonproliferation policy. The Non-Proliferation Treaty is essential to the larger issues of avoiding nuclear war, and needs a much higher priority from our Government than it has received. But we have to realize that, as we make a good and impartial case for the Non-Proliferation Treaty, that the obligations bind both ways, both our countries that would spread weapons, and also on us.

That is my summation. I will be happy to answer any questions.

Mr. **Bonker**. Thank you, Mr. Nye.

We will reserve questions until the end of the hearing.

[The full statement of Mr. Nye's prepared statement follows:]

Prepared Statement of Joseph S. Nye, Jr., Director of the Center for Science and International Affairs, Harvard University

Thank you, Mr. Chairman, I am pleased to have this opportunity to discuss the broad context of the forthcoming Non-Proliferation Treaty Review Conference. I believe that non-proliferation is a major security interest of the United States, and that preservation of the existing treaty is a critical foreign policy objective.

In a world of sovereign states with the right of self defense, it is remarkable that such a large number of the world's states have adhered to a treaty which commits them to forgo the most destructive form of human weaponry, while allowing five other states to possess such weapons. The presumption against nuclear weapons in the treaty shifts the burden of proof from what one would otherwise expect it to be, and that is of enormous assistance to our diplomatic efforts to stem the spread of nuclear weaponry.

Skeptics believe that such a situation of inequality cannot last. Certainly, it would be extremely difficult to creat such a treaty today if it did not already exist. I expect considerable acrimony at the NPT Review Conference this year, but I do not expect the treaty to collapse. On the other hand, the treaty must be renewed by a majority of its adherents in ten years time. I am far less sanguine that we shall surmount that hurdle if we continue on our current course.

The logic of equality need not lead to the demise of the treaty. One can make a reasoned case for inequality in possession of nuclear weapons being in the interests of non-nuclear states. But the obligations bind in two directions and have implications for our larger policy for the control of nuclear arms. I have spelled out these views in a short article "The Logic of Inequality" in the current issue of Foreign Policy magazine, and I attach it as the substance of my testimony. I will be happy to expand on these views in response to your questions.

Mr. **Bonker**. Our next speaker will be Mr. Leonard Spector, senior associate for the Carnegie Endowment for International Peace.

Welcome, Mr. Spector.

STATEMENT OF LEONARD S. SPECTOR, SENIOR ASSOCIATE, CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE

Mr. **Spector**. Thank you.

EFFECTS OF NPT ON NONPARTIES

It is an honor to testify today on the Third Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons, and specifically on the impact of the treaty in curtailing proliferation by nonparties.

The NPT today forms the cornerstone of the international regime that has developed over the past four decades to curb the spread of nuclear arms.

The treaty's central requirements that non-nuclear weapon state parties formally renounce nuclear explosives, that they accept International Atomic Energy Agency safeguards on their entire nuclear programs, and that nuclear-supplier state parties ensure that their nuclear exports are covered by IAEA monitoring, constitute a major barrier to the spread of nuclear arms.

The treaty operates at several levels.

Of particular importance today for curtailing proliferation by nonparties is that with more than 125 members, the pact is the single most tangible embodiment of the growing worldwide norm of nonproliferation that Mr. Nye referred to.

This norm has gradually transformed the act of going nuclear from an accepted symbol of accomplishment and military might into a target for international condemnation and the likely imposition of sanctions.

In practical terms, the pact establishes a standard of conduct that provides the United States and others a universally understood moral and political basis for taking action against the further spread of the bomb.

While the NPT does not address the regional antagonisms that set the pace for proliferation for today's emerging nuclear weapon states—the great majority of whom are outside the treaty—the existence of the accord has, nevertheless, helped to place these would-be bombmakers on the defensive, forcing them to weigh the risk that developing nuclear arms—or making covert weapons programs overt—will carry significant diplomatic, and possibly more concrete, costs. Though they may reject the accord, Argentina, Brazil, Israel, India, North Korea, Pakistan, and South Africa, are nonetheless affected by it.

IMPORTANCE OF NPT REVIEW CONFERENCE

As I will describe in a moment, the pace and intensity of proliferation by non-NPT parties may now be on the rise in several regions of the world.

While the NPT is only one of several tools that can contribute to resisting these pressures, the United States and the world community can ill afford the weakening of any available nonproliferation mechanism.

For this reason, the outcome of the NPT Review Conference carries considerable significance. A strong endorsement of the pact and the norm it embodies by the gathering could substantially reinforce other nonproliferation efforts directed at specific states. On the other hand, an outcome which raised doubts as to the degree of support for the accord—even if triggered by complaints over the failure of United States and Soviet arms control negotiations—could make containment of these new proliferation dangers all the more difficult.

INDIA-PAKISTAN PROLIFERATION

Today, South Asia appears to pose the most imminent threat of increased proliferation, with India and Pakistan already engaged in a quasi-nuclear arms race that could become the real article if an extremely fragile nuclear status quo there cannot be maintained.

Pakistan's efforts to smuggle parts for nuclear weapons out of the United States last year appear to confirm that it has continued its quest for nuclear arms, and some U.S. officials apparently believe that it now has the material to produce them.

According to one recent report on ABC News, Pakistan may have successfully tested the non-nuclear portion of the bomb. Pakistani President Zia, however, possibly responding to a U.S. initiative, has declared that he will limit the output of the Kahuta enrichment plant to 5 percent enriched material, well below the 90 percent needed for nuclear arms.

The Kahuta plant, an installation that is not subject to IAEA inspections, is believed to be Pakistan's only possible source of nuclear weapons material at the moment and is considered the centerpiece of its nuclear weapons program.

If General Zia implements his 5-percent solution, it would mean that without actually abandoning the nuclear option, Islamabad would be freezing its nuclear program well short of the de facto possession of a nuclear arsenal.

Such a step could appreciably reduce the risk of a nuclear arms race with India. But dangers will remain since Pakistan could later enrich its 5 percent material to weapons-grade fairly rapidly.

Indian observers also are worried that Pakistan may already possess a stockpile of bomb-grade material.

Moreover, given General Zia's history of side-stepping nonproliferation pledges, it remains to be seen whether Pakistan will, in fact, restrain its nuclear ambitions as he has announced.

Indira Gandhi's assassination in November of last year has added uncertainties to the situation, and India's new Prime Minister, Rajiv Gandhi, has come under increasing pressure from his own party and from more conservative elements to restart India's nuclear explosives program, believed to have been dormant since New Delhi's single nuclear test in 1974.

In early June, he declared that continued Pakistani progress toward nuclear arms was a cause of deep concern for India, and also indicated that India could manufacture nuclear arms in "several weeks or several months," a seeming admission that New Delhi has already fabricated all the necessary components.

Moreover, since 1974, India has built up its stocks of weapons-usable plutonium not subject to IAEA safeguards, and it appears to have increased its capacity to produce unsafeguarded plutonium by 1,000 percent. This would give it enough material for about a dozen nuclear weapons annually if full capacity were used.

On the other hand, it may be that much of the unsafeguarded weapons material it has on hand will be put into a more benign nuclear energy program. We will have to wait and see how this develops.

If India does take this step, and if it is matched by restraint in Pakistan, this could pave the way for further bilateral, nonproliferation measures, but the situation is extremely fragile, and I think it is on something of a hair trigger.

ISRAELI PROLIFERATION

Recent developments regarding Israel's program are also cause for concern. According to two reports in the Aerospace Daily, which is a usually reliable newsletter here in Washington, since

1981 Israel has deployed nuclear-armed Jericho II missiles, a force that the newsletter claims comprises only part of a much larger nuclear arsenal which includes low-yield, aircraft-deliverable nuclear bombs and nuclear artillery shells.

And I might just add that the reporter that filed this story reiterated it on NBC News, and Anthony Cortesman, who is a well-respected Mideast arms expert, also appeared and offered similar statements on the size of Israel's nuclear arsenal, although not quite the same details on how the weapons were deployed.

If the reports that are based on these various sources are accurate, the long-standing conventional wisdom that Israel possesses perhaps 25 unassembled A-bombs to be used only in a last-ditch attempt to save the nation from extinction, will have to be radically revised.

Taken together with Syria's recent claim that it has received nuclear guarantees from the Soviet Union against any Israeli nuclear threat, the dangers of nuclear confrontation and possible superpower involvement would be significantly heightened.

NORTH KOREAN AND SOUTH AFRICAN PROLIFERATION

Press accounts that I have confirmed with the State Department also indicate that North Korea is building a large indigenous research reactor at Yong Byon. Little has been made public about the facility, but it has apparently caused concerns in South Korea. So far the North has not indicated that it intends to place the reactor under IAEA inspection.

In all of these areas, as well as in South Africa whose potential nuclear arsenal appears to have increased since 1980, the time of the last Review Conference, it will take extraordinary efforts by the international community to restrain the further spread of nuclear arms in the years ahead.

The NPT, through its near universality, will add a critically important dimension to these efforts, whose success will benefit the developed and developing world alike.

EFFECTS OF NPT EXPORT CONSTRAINTS

A second element of the treaty that I mentioned earlier also directly constrains the development of nuclear arms by nonparticipants, namely the requirement of NPT parties to ensure that IAEA safeguards will be maintained on their nuclear exports in recipient states.

In practical terms, this means that countries like Argentina and South Africa cannot use nuclear material and equipment from an NPT party for nuclear arms without incurring the high political cost of violating its international undertakings.

Because of this rule, which a number of nuclear supplier states not party to the treaty have also adopted, virtually all of the nuclear-threshold states that have sought to develop nuclear weapons capabilities have been forced to rely on indigenous resources or on the nuclear blackmarket in order to build facilities that they can keep free from safeguards and thus available for nuclear arms.

Indeed, all of the installations I referred to earlier that have been built since the NPT came into force in 1970 have been developed in this way, considerably increasing their cost and the time necessary to complete them. This has unquestionably been of great importance in slowing the pace of proliferation.

NONPARTY SUBVERSION OF NPT

Unfortunately, there is increasing evidence that one or more non-NPT parties have been making a direct assault on this critical part of the treaty by repeatedly attempting to circumvent the export controls implemented by the United States and others to ensure that all nuclear exports are made under IAEA safeguards.

Although steps have been taken to prosecute the individuals involved in particular smuggling cases, no state has ever been condemned internationally for promoting these activities, which directly undermine the NPT regime.

A clear statement by participants at the NPT Review Conference condemning efforts to bypass NPT-mandated export controls might contribute significantly to a reduction of these activities.

More broadly, given the benefits of the treaty in helping establish the international norm of nonproliferation, it would seem to be in the self-interest of all parties to the accord to use the occasion of the Third NPT Review Conference to underscore their support for the pact.

[Mr. Spector's prepared statement follows:]

Prepared Statement of Leonard S. Spector, Senior Associate, Carnegie Endowment for International Peace

It is an honor to testify today on the Third Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and specifically on the impact of the treaty in curtailing proliferation by non-parties.

The Non-Proliferation Treaty today forms the cornerstone of the international regime that has developed over the past four decades to curb the spread of nuclear arms. The treaty's central requirements, that non-nuclear-weapon state parties formally renounce nuclear explosives, that they accept International Atomic Energy Agency (IAEA) safeguards on their entire nuclear programs, and that nuclear-supplier state parties ensure that their nuclear exports are covered by IAEA monitoring, constitute a major barrier to the spread of nuclear arms.

The treaty operates at several levels. First, it greatly reduces the opportunities for clandestine weapons development in individual member states. This, together with the formal renunciation of such weapons, can in turn provide considerable reassurance to neighboring countries that they will not be confronted with a nuclear adversary, dampening pressures that could lead to spiraling regional nuclear arms races. Provocative behavior even under the treaty's strictures, however, such as Iraq's disturbing expansion of its nuclear program in the late 1970s and Libya's various attempts to obtain sensitive nuclear technology, can undermine the confidence-building aspects of the pact.

Of greater importance today for curtailing proliferation by non-parties is that with more than 125 members, the pact is the single most tangible embodiment of the growing world-wide norm of non-proliferation. This norm has gradually transformed the act of going nuclear from an accepted symbol of accomplishment and military might into a target for international condemnation and the likely imposition of sanctions.

In practical terms, the pact establishes a standard of conduct that provides the United States and others a universally understood moral and political basis for taking action against the further spread of the bomb. While the NPT does not address the regional antagonisms that set the pace of proliferation for today's emerging nuclear weapon states, the great majority of which are outside the treaty, the existence of the accord has, nevertheless helped to place these would-be bomb-makers on the defensive, forcing them to weigh the risk that developing nuclear arms (or making covert weapons programs overt) will carry significant diplomatic, and possibly more concrete, costs. Though they may reject the accord, Argentina, Brazil, Israel, India, North Korea, Pakistan, and South Africa, are nonetheless affected by it.

As I will describe in a moment, the pace and intensity of proliferation by non-NPT parties may now be on the rise in several regions of the world. While the NPT is only one of several tools that can contribute to resisting these pressures, the United States and the world community can ill afford the weakening of any available non-proliferation mechanism. For this reason, the outcome of the NPT Review Conference carries considerable significance. A strong endorsement of the pact and the norm it embodies by the gathering could substantially reinforce other non-proliferation efforts directed at specific states. On the other hand, an outcome which raised doubts as to the degree of support for the accord -- even if triggered by complaints over the failure of U.S. and Soviet arms control negotiations -- would make containment of these new proliferation dangers all the more difficult.

Today, South Asia poses the most imminent threat of increased proliferation, with India and Pakistan already engaged in a quasi-nuclear arms race that could become the real article if an extremely fragile nuclear status quo there cannot be maintained.

Pakistan's efforts to smuggle parts for nuclear weapons out of the United States last year appear to confirm it has continued its quest for nuclear arms, and some U.S. officials apparently believe it now possesses the nuclear material for several nuclear weapons.[1] According to one recent report, moreover, Pakistan has successfully tested the non-nuclear trigger for the bomb.[2]

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[1] Rick Atkinson, "Nuclear Parts Sought By Pakistanis," Washington Post, July 21, 1984; Seymour M. Hersh, "Pakistani in U.S. Sought to Ship A-Bomb Trigger," New York Times, February 25, 1985; "Shadow of an Indian H-Bomb," Foreign Report, December 13, 1984, p. 1.

[2] ABC News, Good Morning, America, June 11, 1985.

However, Pakistani President Zia, possibly responding to a U.S. proposal, has declared that he will limit the output of the Kahuta enrichment plant to five-percent-enriched uranium, well below the ninety percent enrichment needed for nuclear arms.[3] The Kahuta plant, an installation not subject to IAEA inspections, is believed to be Pakistan's only possible source of nuclear weapons material at the moment and is considered the centerpiece of its nuclear weapons program. If General Zia implements his "five percent solution," it would mean that, without actually abandoning the nuclear option, Islamabad would be freezing its nuclear program well short of the de facto possession of a nuclear arsenal. Such a step could appreciably reduce the risk of a nuclear arms race with India. But dangers will remain since Pakistan could later enrich its five-percent material to weapons-grade fairly rapidly. Indian observers also worry that Pakistan may have already stockpiled bomb-grade material. Moreover, given General Zia's history of side-stepping non-proliferation pledges, it remains to be seen whether Pakistan will in fact restrain its nuclear ambitions as he has announced.

Indira Gandhi's assassination in November 1984 has added uncertainties to the situation. Indo-Pakistani relations have seesawed ever since, with India's new Prime Minister, Rajiv Gandhi, indirectly accusing Pakistan of supporting the Sikh terrorism that led to his mother's death and to the recent series of bombings in several Indian cities.[4]

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[3] Simon Henderson, "U.S. Warns Pakistan on Enriching Uranium," Financial Times, December 7, 1984; Mary Anne Weaver, "Pakistan 'Over the Hump' -- Zia Interview," Christian Science Monitor, March 1, 1985.

Gandhi has come under increasing pressure from his own party and from more conservative elements to restart India's nuclear explosives program, believed to have been dormant since New Delhi's single nuclear test in 1974. In early June he declared that continued Pakistani progress towards nuclear arms was forcing India to reconsider its commitment to a peaceful nuclear policy and that India could manufacture nuclear arms in "several weeks or several months," a seeming admission that New Delhi has already fabricated all the necessary components.[5] Moreover, since 1974, India has built up its stocks of weapons-usable plutonium not subject to IAEA safeguards and thus available for use in nuclear arms, and, by building additional facilities which it has also refused to place under IAEA inspection, it has vastly increased its capacity for producing additional plutonium free from external non-proliferation controls. With the large unsafeguarded R-5 research reactor, which may recently have come on line, India will have increased this capability by 1000 percent in comparison to 1974, permitting it to produce enough nuclear weapons material for perhaps a dozen weapons annually.[6]

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[4] Steven R. Weisman, "Further Bombings Expected in India," New York Times, May 17, 1985; William Claiborne, "Gandhi Expected to Win Big Majority," Washington Post, December 23, 1984.

[5] Stuart Auerbach, "Gandhi Hits U.S. 'Soft Line' on Pakistan," Washington Post, June 5, 1985.

[6] Spector, Nuclear Proliferation Today, pp. 50-51, 54-58; Amrita Abraham, "Plutonium Missing in Tarapur Plant," Sunday Observer (Bombay), October 16-23, 1983. Start-up of R-5 mentioned to author by K. Subrahmanyam, Director, Institute for Defense Studies, (Delhi), June 1985.

On the other hand, later this year the Gandhi administration may decide to devote much of its existing plutonium stockpile (probably sufficient for about twenty weapons) to relatively benign nuclear energy research -- depending on how much of the stockpile is used to fuel a new experimental breeder reactor.[7] Such a step could serve to lessen regional nuclear tensions, at least temporarily, and, if matched by restraint in Pakistan could pave the way for further bilateral non-proliferation measures.

Recent developments regarding Israel's nuclear program are also cause for concern. According to two reports in the Aerospace Daily, since 1981 Israel has deployed nuclear-armed Jericho II missiles, a force that the newsletter claims comprises only part of a much larger nuclear arsenal which includes low-yield, aircraft-deliverable nuclear bombs and nuclear artillery shells.[8] If the reports, based on unnamed "U.S. sources," are accurate, the long-standing conventional wisdom that Israel possesses perhaps twenty-five unassembled A-bombs to be used only in a last-ditch attempt to save the nation from extinction, will have to be radically revised. Taken together with Syria's recent claim that it has received nuclear guarantees from the Soviet Union against any Israeli nuclear threat, the dangers of nuclear confrontation and possible superpower involvement would be significantly heightened.[9]

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[7] "Efforts for Self-Sufficiency in N-Energy Reviewed," JPRS-TND-85-005, p. 77

[8] "Israel Said to Deploy Jericho Missile," Aerospace Daily, May 1, 1985; "Nuclear Efforts of Israel, Pakistan Prompt Meeting of U.S. Group," Aerospace Daily, May 17, 1985.

Press accounts that I have confirmed with the State Department also indicate that North Korea is building a large indigenous research reactor at Yong Byon. Little has been made public about the facility, which has apparently raised concerns in South Korea.[10] So far the North has not indicated that it intends to place the reactor under IAEA inspection. This fact, together with the size of the plant raise the possiblilty that the facility is being built to produce plutonium as the first step toward a nuclear weapons program.

Although South Korea has abandoned the nuclear weapons program it initiated in the early 1970s, during the past year it made unsuccessful overtures to Canada concerning a joint program apparently involving the separation of weapons-usable plutonium, seeming to indicate a continuing interest in the material.[11] With an amphibious North Korean commando unit having been captured while attempting to sabotage South Korea's Wolsung CANDU 3 nuclear power plant in August 1983, and with four members of the South Korean cabinet having been killed by a bomb planted by North Korean agents two months later, tensions between Seoul and

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[9] "War of Liberation," New York Review of Books, November 22, 1984, p. 40.

[10] See e.g., "Paper Concerned Over North's Nuclear Capability," Korea Herald, June 11, 1985, reprinted in FBIS/Asia Daily Report, June 11, 1985, P. E-2.

[11] David Albright, "World Inventories of Plutonium" (Working Paper), Federation of American Scientists, citing T. Shorrock and O. Gadacz, "U.S. Intervention in Nuclear Fuel Project Still a Mystery," Business Korea, April 1985, p. 47.

Pyongyang have remained high, despite recent bilateral talks.[12]

In all of these areas, as well as in South Africa whose potential nuclear arsenal may have doubled since the 1980 NPT Review Conference, it will take extraordinary efforts by the international community to restrain the further spread of nuclear arms in the years ahead. The NPT, through its near universality will add a critically important dimension to these efforts, whose success will benefit the developed and developing world alike.

A second element of the treaty, mentioned earlier, also directly constrains the development of nuclear arms by non-participants, namely the requirement for NPT-parties to ensure that IAEA safeguards will be maintained on their nuclear exports in recipient states. In practical terms, this means that countries like Argentina and South Africa cannot use nuclear material or equipment from an NPT party for nuclear arms with out incurring the high political cost of violating its international undertakings.

Because of this rule, which a number of nuclear supplier states not party to the treaty have also adopted under the London Nuclear Suppliers Group Guidelines, virtually all of the nuclear-threshold states that have sought to develop nuclear weapons capabilities have been forced to rely on indigenous resources or on the nuclear blackmarket in order to build facilities that they can keep free from safeguards and thus available for nuclear arms. Indeed all of the installations I referred to earlier that have been built since the NPT came into force in 1970 have been developed in this way, considerably increasing their cost and the time necessary to complete them. This has unquestionably been of great importance in slowing the pace of proliferation.

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[12] "Wolsung Called Target of Ship From North," Nuclear News, October 1983.

Unfortunately, there is increasing evidence that one or more non-NPT parties have made a direct assault on this critical part of the treaty by repeatedly attempting to circumvent the export controls implemented by the United States and others to ensure that all nuclear exports are made under IAEA safeguards. Although steps have been taken to prosecute the individuals involved in particular smuggling cases, no state has ever been condemned internationally for promoting these activities, which directly undermine the NPT regime.

A clear statement by participants at the NPT Review Conference condemning efforts to by-pass NPT-mandated export controls might contribute significantly to a reduction of these activities. More broadly, given the considerable benefits of the treaty in helping establish the international norm of non-proliferation, it would seem to be in the self-interest of all parties to the accord to use the occasion of the Third NPT Review Conference to underscore their support for the pact.

Mr. **Bonker**. Thank you, Mr. Spector.

We shall now move to our third witness on the panel of private sector witnesses, Mr. Fersht, who is here representing Greenpeace.

STATEMENT OF ERIC M. FERSHT, DISARMAMENT CAMPAIGN DIRECTOR, GREENPEACE

Mr. **Fersht**. Mr. Chairman, members of the committee, I would first of all like to thank you for inviting us here to share our observations and approaches to the Third Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons.

Because my prepared statement is lengthy and was completed last week, I will ask that it be submitted for the record. I am going to depart from it to touch upon a new development that will have an enormous bearing on the Third Review Conference.

CONTINUED TESTING UDERMINES NPT

As you know, on Monday Premier Gorbachev announced that the Soviet Union would suspend all nuclear explosive tests for 5 months commencing on August 6. As I will discuss a bit later, it is precisely the failure of the nuclear weapon states to achieve an end to testing that has put the treaty's future in doubt.

President Reagan's dismissal of the Soviet action, and I stress the word action, it is not a proposal, and what could be characterized as his weak counterproposal is certain to isolate the United States when the review conference convenes in Geneva later this month.

For this reason alone, anyone concerned about the fate of the NPT should find the President's response unacceptable. It is unacceptable to our organization. I think if they were in full possession of the facts it would be unacceptable to the American people. It is certainly unacceptable to most of the nations party to the NPT, and with all due respect, it should be unacceptable to the United States Congress.

The Soviet moratorium action warrants a response from the President and Congress of equal seriousness for there will never be progress on arms control if all initiatives are dismissed as propaganda. I would agree with Mr. Nye that a test ban is not the be all and end all, but it is politically significant. It is viewed as a minimum condition, not the last arms control agreement to be sought, and certainly is considered an important agreement in the context of the NPT.

Eighteen months ago Greenpeace initiated its campaign to address the Third Review Conference in the belief that it was the most opportune forum in which to draw world attention to the threat of nuclear proliferation. It was a logical extension of our efforts to achieve Comprehensive Test Ban Treaty and our efforts in Europe and now in this country to halt commerce and traffic in the principal ingredient of nuclear weapons, plutonium.

DUAL PURPOSE OF THIRD REVIEW CONFERENCE

The Third Review Conference represents an opportunity for arms control and nonproliferation advocates, both governmental and nongovernmental, to press for progress on two fronts.

First, to strengthen the Non-Proliferation Treaty. And second, to exert pressure on nuclear weapon states to achieve real arms control progress, and specifically to forge a consensus around a demand for a Comprehensive Test Ban Treaty, as I said, long acknowledged as the minimum condition for aticle VI compliance.

We believe the NPT, for all its shortcomings, is an integral part of the international nonproliferation regime, but if it is to endure, steps must be taken to strengthen and improve it.

In the past 8 months, my colleagues and I have presented our ideas to more than 60 ambassadors of states party to the NPT, including delegates from Western Group nations, Eastern Bloc nations, and neutral and nonaligned nations. We have also presented our views to ambassadors and government officials of key threshold nuclear nations not party to the NPT and members of parliament and foreign ministry officials of at least 10 Western Group nations.

We have consulted with numerous delegations at the last preparatory meeting for the NPT review, circulating briefing materials and several proposals for action. As a result of this work, I feel we can speak with insight and authority on the issues that will be raised at the review conference.

Based on our extensive discussions with officials, with approximately half of the NPT states, it is not an overstatement to say that the future of the NPT hangs in the balance. The Third Review Conference could be the beginning of the end of the NPT and the international nonproliferation regime of which it is the centerpiece. However, we hope that is not the case.

While it is unlikely that this Review Conference will see widespread withdrawals of nations and the complete unraveling of the treaty, another deadlocked review, as occurred in 1980, could well set the tone for its demise by the 1995 expiration date. While the primary purpose of the NPT is to prevent horizontal proliferation, the treaty recognize that there is a fundmental link between the superpowers' arms race and horizontal proliferation.

After 15 years, the treaty can be judged a partial success. There are, however, serious problems with the treaty that cannot be ignored. All of these problems will undoubtedly be reflected in the rhetoric that will prevade the Review Conference, but the problems go much deeper than the rhetoric. More complete discussion of these problems is in my prepared statement. I will mention just one.

ARMS REDUCTIONS AND NPT

The most serious threat to the treaty, as has been mentioned by Mr. Nye and myself, is the failure of the nuclear weapon states to fulfill their article VI obligations and to negotiate effectively for nuclear disarmament. This failure was the most devisive issue at the previous review conferences in 1975 and 1980, and prevented agreement on most other issues.

To ensure a successful review conference, there must be tangible results achieved, not merely the absence of dissension. These results could take the form of a strong final declaration, as well as adoption of proposals that demonstrate a commitment by all parties to fulfill their duties under the treaty.

There are several ways in which the states party to the treaty and, in particular, the nonnuclear weapon states party might address issues of concern. We know that the nuclear and nonaligned group will be seeking a commitment to an immediate moratorium on testing, followed by urgent conclusion of a CTB.

A CTB is central to the NPT because it would prevent the development of a demonstrable nuclear capacity in new countries and the next generation of nuclear weapons in the nuclear weapon states. A CTB would considerably strengthen the internationl nonproliferation regime.

STEPS TO INSURING VIABILITY OF NPT

The following proposals represent some of our ideas for action at the review conference which, if adopted, would mark a major turning point toward ensuring the long-term viability of the NPT.

Our first proposal primarily addresses concerns over article VI compliance. This emphasis reflects a prevailing view that article VI noncompliance is the greatest threat to the future of the NPT. Our proposal urges the review conferees to produce the final declaration which contain the steps necessary for article VI compliance and a demand for immediate moratorium on underground nuclear explosive tests.

The final declaration must be more than a reaffirmation of the treaty's objectives.

In 1980, no final document was produced, to demonstrate the discontent of the nonnuclear weapon states with the progress of the nuclear weapon states on arms control. If consensus on a strong final declaration is blocked, we believe that the nonnuclear weapon states will bring approval of a strong final document to a vote, as allowed by the review conference rules of procedure.

Our second proposal is to open up discussions on how the NPT should be modified or replaced when it expires in 1995. As things stand now, there is a very real risk that when the Non-Proliferation Treaty expires in 1995, many states will refuse to sign it for another term. The Third Review Conference could be a forum in which state parties seek to establish a negotiating mandate for a post-1995 NPT. It proposal could appear formally in the final declaration as a resolution or as an expression of minority view. Such a new treaty could contain, among other things, provisions for universally applied full-scope safeguards, a separation of civil and military plutonium and highly enriched uranium, and a ban on nuclear explosive testing.

Following the Third Review Conference, a resolution could be introduced in the first committee of the United Nations calling for negotiations to replace the current NPT. Resolution 2028 could at that time be reintroduced. It was this resolution which set forth the guiding principles under which the NPT was to be negotiated. These principles still provide a sound basis for a replacement NPT.

The nuclear weapon states supported these principles in 1965, and would be hard pressed to find acceptable reasons for not doing so now.

When one of my colleagues mentioned this new NPT proposal to Indian Ambassador Dubey in Geneva several months ago, he said that he was relieved to hear that we thought we were all going to last that long. I am by no means certain that we are, but we have much to gain and little to lose from exploring ways of improving the current NPT.

In addition to the Indian ambassador, several officials of other key threshold states not party to the NPT have stated that their countries would seriously consider participating in the negotiations for a post-1995 Non-Proliferation Treaty.

Introduction of a congressional resolution to parallel resolution 2028 could be a significant demonstration of support by members of Congress for a more effective Non-Proliferation Treaty and regime. Such a sense of the Congress resolution could be framed as an affirmation of the U.S. commitment to nonproliferation, and we would urge this committee to consider such a proposal.

Interestingly, resolution 2028 passed the General Assembly on November 19, 1965. President Reagan and President Gorbachev will begin their summit meeting on the 20th anniversary of this historic date.

SDI EFFECT ON NPT

Since we are here to discuss the NPT Review Conference and the future of the non-proliferation regime, I would like to raise one more issue. It is one that concerns us greatly and prompted us to produce a lengthy study to examine it more thoroughly. This study, to my knowledge, represents the first analysis that examines the implications of star wars on the NPT. Our analysis reveals that certain kinds of star wars research and/or development conducted by U.S. allies would violate the Non-Proliferation Treaty. This study concludes that the transfer by the United States to any country of any nuclear explosive-based defensive weapon system is flatly prohibited by the NPT, as is any collaborative research program with any nonnuclear weapon state aimed at developing such a weapon system.

President Reagan, in our view, has misled the American public by characterizing his Star Wars Program as a primarily non-nuclear defensive system which will render nuclear weapons impotent and obsolete. One technology under serious consideration, referred to as the excalibur, would utilize small nuclear explosions to generate missile disabling lasers. Other nuclear explosive-based weapons are said to be under consideration for the Star Wars Program.

I would urge the committee to consider these issues as it evaluates the future of the NPT and the implications of the Star Wars Program.

I would also ask permission to submit a copy of this study for the hearing record.

CONGRESS' ROLE

There are some important actions that the Congress could take to demonstrate its commitment to nonproliferation. There is considerable interest in U.S. congressional initiatives by virtually all NPT states. For instance, passage last year of the Kennedy-Mathias amendment on the Comprehensive Test Ban to the Department of Defense Authorization Legislation was referenced frequently by delegates as the only evidence they saw of a U.S. commitment to arms control.

Another point is that the presence of several members of Congress at the recent Groupe de Bellerive Colloquium in Geneva, which I did not mention but is referenced in my prepared statement, sent an important signal that nonproliferation is being taken seriously by the U.S. Congress. This perception by the rest of the world is important and one that I hope will not be ignored by members of this committee.

Let me summarize a few steps that we believe can be taken by the Congress which would have an enormously positive impact on the Review Conference and the future of the NPT.

Passage by the House of Representatives of H.J. Res. 3, which as you know, Mr. Chairman, and which you mentioned, urges the President to ratify the Threshold Test Ban and Peaceful Nuclear Explosions Treaties, and to resume Comprehensive Test Ban negotiations. This should be passed prior to the conclusion of the Review Conference. I realize it is impossible to take that measure up this week, but we would hope that it could be taken up the first thing in September.

And we would also say that consideration should be given to even stronger legislative steps, binding steps to achieve an end to nuclear explosive testing. And if the President fails to do so, we believe that it is within the purview of the Congress to take steps in that direction.

Second, a Congressional delegation should be on the official U.S. delegation to the NPT Review Conference. In order to understand the pressures facing the treaty and the treaty nations, members of Congress must observe the Third Review Conference firsthand. I cannot express strongly enough how important this presence can be for the members themselves and for the concern that it will demonstrate to delegates from other nations.

Third, we would propose consideration of legislative initiatives, such as the one I mentioned, to reaffirm the principles embodied in U.N. Resolution 2028 to bolster the prospects that the existing NPT or an improved NPT will continue beyond 1995.

There are some longer-range initiatives that are outlined in my prepared remarks. They deal with a wider range of issues and not just article VI issues.

Mr. Chairman, members of the committee, the Congress does, indeed, have an important role to play in ensuring a successful Review Conference. The fate of the NPT and more fundamentally, efforts to halt vertical and horizontal proliferation, are at a critical juncture. I think we would all agree on this point. Responsibility for the future of nonproliferation rests largely on the shoulders of the United States, though certainly not exclusively on this country alone.

The Congress can and should help shape the direction of future nonproliferation policies. Without this oversight and insight, we fear that the future of this planet will be gravely threatened.

I thank you for the opportunity to present our views today.

[Mr. Fersht's prepared statement follows:]

PREPARED STATEMENT OF ERIC M. FERSHT DISARMAMENT CAMPAIGN DIRECTOR, GREENPEACE

Mr. Chairmen, members of the Committee, I would first of all like to thank you for inviting us here to share our observations and ideas about possible approaches to the Third Review Conference of the Treaty on the Non-Proliferation Of Nuclear Weapons. It is indeed an honor and a priviledge to be before you with so distinguished a panel of speakers.

Perhaps I should start out by explaining why Greenpeace has taken such an interest in the NPT and why we have devoted so much time and energy to it.

Eighteen months ago Greenpeace initiated its Campaign to address the Third Review Conference of the Non-Proliferation Treaty in the belief that it was the most opportune forum in which to draw world attention to the threat of nuclear proliferation. It was a logical extension of our efforts to achieve a Comprehensive Test Ban Treaty, and our efforts in Europe and now in this country to halt commerce and traffic in the principal ingredient of nuclear weapons--plutonium.

The Third Review Conference to us represents an opportunity for arms control and non-proliferation advocates, both governmental and non-governmental, to press for progress on two fronts: to strengthen the Non-Proliferation Treaty, and to exert pressure on the Nuclear Weapons States to achieve real arms control progress -- specifically to forge a consensus around a demand for a Comprehensive Test Ban Treaty, long acknowledged as the sine qua non for Article VI compliance.

The Review Conference is also an opportunity to begin building a political constituency around non-proliferation issues. Non-proliferation has tended to slip through the cracks in the political arena. It has been viewed partly as a nuclear energy issue, and partly as a nuclear weapons issue, with neither of these constituencies adopting it as their own. One of our objectives is to mobilize public opinion in this country to be actively concerned about both vertical and horizontal proliferation.

We believe that the NPT, for all its shortcomings, is an integral part of the international non-proliferation "regime." But if it is to endure, steps must be taken to strengthen and improve it.

Also, we are extraordinarily concerned about the nuclear arms race between the superpowers. We believe that the NPT, and the Third Review Conference, provide the Non-Nuclear Weapons States with an important opportunity to demonstrate their concerns about arms control progress in a constructive way.

Linked to this objective, of course, is achievement of a Comprehensive Test Ban. It is our view that a Comprehensive Test Ban is the critical first step towards stopping all forms of

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nuclear proliferation and creating the right political climate for negotiations on other nuclear arms control limitations. An end to testing should be viewed as an essential precursor to achieving success on strategic arms limitations.

Since initiating this project, we have analyzed the history of this treaty, made some judgements about the needs for its future, and discussed this issue first hand with the American public, Members of Congress, US government officials, and numerous experts. But because this issue transcends US policy, and because our organization is active in fifteen countries we have gone even further. In the past eight months my colleagues and I, have traveled to present our ideas to the following people:

--More than 60 Ambassadors of States Party to the NPT, including delegates from Western group nations, Eastern bloc nations, and Neutral and Non-Aligned Nations.

--Ambassadors and Government Officials of key "threshold" nuclear nations not party to the NPT.

--An all party grouping of Members of the British House of Commons including principal party leaders.

--Officials of the British Foreign Office.

--Members of the European Parliament in Brussels.

--Members of the Bundestag in Bonn.

--Officials of the West German Foreign Ministry.

--Members of the Danish Parliament.

--Members of the Dutch Parliament.

At the last preparatory meeting for the NPT Review Conference in Geneva, between April 22 - May 3, Greenpeace established a strong presence. During the two weeks of this meeting we consulted with numerous delegations, circulating briefing materials and several proposals for action at the Review Conference.

Subsequently, the Chairman of the Neutral and Non-Aligned group nations party to the NPT, Ambassador Tonwe of Nigeria, invited us to formally present our ideas to their planning meeting on July 5th. We made this presentation in Geneva, one week after a major international colloquium on "Nuclear War, Nuclear Proliferation and their Consequences," sponsored by the Groupe de Bellerive.

I cite this colloquium because it was billed as a "dry run" for the Review Conference, raising issues which coincide with what most observers believe will be the major issues facing the parties to the NPT in September. This colloquium was attended by six US Senators and one House Member, as well as approximately five hundred participants from throughout the world.

As a result of this work, I feel I can speak with some insight and authority on the issues that will be raised at this Review Conference. Let me start by giving the Committee an overview of how we assess the current state of affairs of the NPT.

TREATY BACKGROUND

Based on our extensive discussions with officials with approximately half of the NPT states, it is not an understatement to say that the future of the Treaty hangs in the balance. The Third Review Conference could be the beginning of the end of the NPT and the international nuclear non-proliferation regime of which it is the centerpiece.

While it is unlikely that this Review Conference will see widespread withdrawals of nations and the complete unravelling of the Treaty, another deadlocked Review could well set the tone for its demise by the 1995 expiration date.

The NPT entered into force in 1970 for a period of 25 years. The 130 States Party includes three nuclear weapons states: the UK, US, and USSR. The People's Republic of China and France have not joined, although France claims to abide by the Treaty's provisions.

The NPT was negotiated by the superpowers within the framework of the Eighteen Nation Disarmament Committee (ENDC). The main objective of the superpowers at the time was to prevent more Western States, and in particular West Germany, from developing independent nuclear capability. It is only since the early '70s that their proliferation fears have focused on the developing world.

While the primary purpose of the NPT is to prevent "horizontal proliferation" -- the spread of independent nuclear weapons capability to more countries -- the Treaty recognizes that there is a fundamental link between the superpower arms race and horizontal proliferation. As long as the US, USSR and UK continue to base their security on the development of large nuclear arsenals, other states will also seek to acquire nuclear weapons.

But a bargain was struck in the NPT. In return for the Non-Nuclear Weapons States Party (NNWS) to not develop or acquire nuclear weapons, the Nuclear Weapons States Party (NWS) pledged to dismantle their own nuclear arsenals, as spelled out in Article VI.

Since the Treaty came into force in 1970, the NWS have completely failed to fulfill their obligations under Article VI. A Comprehensive Test Ban Treaty (CTBT) has still not been concluded. Since 1980, the US-Soviet negotiations on reducing strategic arsenals have failed to produce any agreements. The nuclear arms race has continued unabated and is now on the point of moving into a new and even more dangerous phase with the President's commitment to Star Wars.

The superpower arms race has had its anticipated effect. At least 10 other states are expected to have nuclear weapons capability by the turn of the century.

Because of this, and the failure of the Treaty in other areas, the NNWS are now profoundly dissatisfied with the NPT. Some have indicated that unless there is significant progress on nuclear arms control by the NWS they will be forced to reconsider their adherence to the Treaty. The days are probably over when the superpowers can respond to this criticism with a "damn the torpedoes, full speed ahead..." attitude. The treaty is much too important for that.

The Treaty imposes different obligations on the NWS and NNWS. The NNWS are obliged:

Article II - not to acquire or develop nuclear weapons

Article III - to accept International Atomic Energy Agency (IAEA) safeguards on all their nuclear activities to help prevent diversion of nuclear material for weapons purposes.

The NWS are obliged:

Article I - not to transfer nuclear weapons to any recipient whatsoever.

Article IV - to assist NNWS in the development of nuclear energy for peaceful purposes.

Article VI - to make progress towards nuclear and general disarmament.

The NWS are not obliged to accept IAEA safeguards on their peaceful or military nuclear facilities and there are no limits set on their nuclear weapons programs beyond the requirements of Article VI.

ARTICLE VI

One of the guiding principles of the negotiations for the NPT was that the Treaty should contain an acceptable balance of responsibilities and obligations for the nuclear and non-nuclear powers. The most important part of the quid pro quo between the NNWS and NWS is Article VI:

> "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament..."

Article VI obliges the NWS to do more than conduct negotiations on nuclear disarmament. The understanding of the Parties was that negotiations for nuclear disarmament should produce results. If results were not forthcoming then some or all of the NWS could not be negotiating in "good faith".

The NNWS made it clear during the Treaty negotiations that without progress towards nuclear disarmament the NPT would not be viable.

Some delegations suggested that failure of the NWS to comply with Article VI would constitute justification under Article X for States to withdraw from the Treaty.

As a way of monitoring compliance with Article VI the NNWS insisted on a Review Conference every five years. The five-year interval was chosen on the assumption that negotiations in good faith would produce agreements worthy of consideration at least every five years.

The NWS assured the NNWS that they would take their obligations under Article VI seriously:

> USSR: (on Article VI) "Never in all of history have States made such a commitment." (UNGA/C.I/1571 p. 14)
>
> UK: "I cannot prove (the nuclear powers') sincerity. An act of faith rather than objective data is required. I accept that when they pledge themselves to pursue negotiations in good faith to end the nuclear arms race at an early date they mean what they say." (UNGA/C.I/1558 p. 15)
>
> US: "Article VI was added, and subsequently strengthened, to give further effect to the principle that the Treaty should embody an acceptable balance of obligations. It binds the Parties to end the nuclear arms race at an early date and to seek effective disarmament." (UNGA/C.I/1568 p. 60)

CURRENT ASSESSMENT

After 15 years the Treaty can be judged a partial success.

- --it has 130 member states
- --most of the NNWS have accepted IAEA safeguards
- --none of the NNWS has developed or demonstrated nuclear weapons capability

There are, however, serious problems with the Treaty. All of these problems will undoubtedly be reflected in the rhetoric that will pervade the Review Conference. But the problems go much

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deeper than the rhetoric:

1. Nearly all states believed to have an interest in developing nuclear weapons capability have refused to sign the NPT on the grounds that it is "discriminatory" and because the NWS have done nothing to limit their own nuclear arsenals as required under Article VI. Ten more states are expected to have independent nuclear capability by the turn of the century.

2. The NWS have failed to give adequate guarantees to the NNWS that they will not be the subject of nuclear attack.

3. Nuclear energy has not provided the benefits the developing NNWS expected in the late '60s. For most NNWS the cost, together with environmental and safety factors, is now prohibitive. Those NNWS who have decided to pursue nuclear energy have not received any special assistance from the NWS. In many cases non-parties have received better terms -- and without being required to accept full-scope safeguards.

4. Nuclear supplier states party to the NPT have violated the spirit of the Treaty by supplying "sensitive" nuclear technology without requiring adequate safeguards to non-party states as a condition of supply.

5. Many NNWS maintain that restrictions on the export of "sensitive" nuclear technology imposed by the nuclear supplier states in the late '70s contravenes Article IV, which allows for the "fullest possible" exchange of peaceful nuclear technology.

6. IAEA safeguards on peaceful nuclear facilities only monitor activities. They cannot prevent the diversion of nuclear material for weapons purposes, particularly over the long term. Furthermore, although NNWS must have full-scope safeguards on all nuclear facilities the NWS have agreed to IAEA safeguards on very few of theirs.

7. The NWS/NNWS distinction of the '60s is no longer clear. A growing number of NNWS to the Treaty have nuclear weapons stationed on their territory which form an integral part of their national security. This, according to one ambassador to the Conference on Disarmament, makes them "semi-weapons states." Some NNWS also have the capacity to build quickly their own nuclear weapons should a crisis develop.

8. The US and UK have violated the spirit of the Treaty and US law by exchanging nuclear weapon design and plutonium from civilian reactors for weapons purposes. And, as I will discuss later, the President's Strategic Defense Initiative may also directly violate the NPT.

9. Nuclear trade will increasingly take place outside of the NPT in coming years as states not party to the Treaty, such as Argentina, Brazil and Spain become nuclear suppliers.

10. The most serious threat to the Treaty, however, is the failure of the NWS to fulfill their obligations under Article VI and to negotiate effectively for nuclear disarmament.

This failure was the most divisive issue at the previous Review Conferences in 1975 and 1980 and prevented agreement on all other proliferation issues.

PROSPECTS FOR THE THIRD REVIEW CONFERENCE

The Third Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) will convene in Geneva on August 27, 1985. Most of the 130 parties to the Treaty are expected to participate.

When the Review Conference convenes, it is unlikely that the NWS will be able to show any progress at all on Article VI compliance. The nuclear arsenals of all three NWS have increased considerably in the last five years and there has been no progress on nuclear arms control at all:

--trilateral negotiations on the CTBT were abandoned in 1980
--the NWS have blocked negotiations on a CTBT in the Conference on Disarmament
--INF and START negotiations were suspended in 1983
--SALT II, the TTBT and Peaceful Nuclear Explosions Treaty are still not ratified

In spite of the failure of the NWS to fulfill their Treaty obligations they consider the Treaty to be valuable. The commitment of 127 NNWS not to develop nuclear weapons and to accept IAEA safeguards is a major contribution to global security. The NPT also provides an essential framework for international nuclear trade in nuclear materials and facilities.

While publicly playing down the importance of the Review Conference, the NWS are actively preparing for it. The NWS have held a series of meetings on non-proliferation at which, among other things, they developed common positions for the Review Conference.

Although anticipating a difficult Conference, neither the US nor the USSR is yet convinced that they must meet criticism over Article VI with actual progress on nuclear disarmament. Officials of the US Arms Control and Disarmament Agency expect a "healthy exchange of views" and will consider the Conference to be a success if no states withdraw from the Treaty or threaten publicly to do so. In short, the NWS believe if they can survive the Conference the NPT and Article VI will fade away for another five years. This, however, is an inadequate definition of success.

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The most outspoken critics of the superpowers' record on Article VI come from the neutral and non-aligned group of the NNWS. Many of these states expect the Review Conference to be contentious, if not a "disaster". They view substantive progress under Article VI between now and the Review Conference as the only way it can be considered a "success."

The neutral and non-aligned group will seek, in particular, a commitment to immediate moratorium on testing followed by the urgent conclusion of A CTBT. A CTBT is central to the NPT because it would prevent the development of a demonstrable nuclear capacity in new countries and the next generation of nuclear weapons in the NWS. A CTBT would considerably strengthen the international non-proliferation regime.

The current US-Soviet negotiations on strategic arms reductions, intermediate-range nuclear forces, and ballistic-missile defense/space-based weapons will be resuming in Geneva in September. However, these negotiations are unlikely to improve the mood at the Review Conference. In our estimation, the neutral and non-aligned nations are unlikely to consider discussions alone as progress under Article VI.

To ensure a "successful" Review Conference there must be tangible results achieved, not merely the absence of dissension. These results could take the form of a strong final declaration, as well as adoption of proposals that demonstrate a commitment by all parties to fulfill their duties and obligations under the treaty.

There are several ways in which the States Party to the Treaty, in particular the Non-Nuclear Weapons States Party (NNWS), might address issues of concern. The following proposals represent some opportunities for action at the Review Conference which, if adopted, would mark a major turning point toward ensuring the long-term viability of the NPT.

Our first proposal primarily addresses concern over Article VI compliance by the Nuclear Weapons States (NWS). This emphasis reflects the prevailing view that Article VI non-compliance is the single greatest threat to the future of the NPT.

This proposal urges the Review Conferees to produce a Final Declaration which contains the steps necessary for Article VI compliance and a demand for an immediate moratorium on underground nuclear explosive tests. The final declaration should be more than a reaffirmation of the Treaty's objectives. In 1980, no final document was produced to demonstrate the discontent of the NNWS with the progress of the NWS on arms control. If consensus on a strong final declaration is blocked, we advocate that the NNWS bring approval of a strong final document to a vote, as allowed by the Review Conference Rules of Procedure.

The second proposal is to open up discussions on how the NPT should be modified or replaced when it expires in 1995. As things stand now, there is a very real risk that when the Non-Proliferation Treaty "expires" in 1995, many states will refuse to sign it for another term. [In fact, what this expiration means will be subject to legal interpretation. It is commonly understood to mean that the parties to the Treaty must vote to reaffirm it. The US Arms Control and Disarmament Agency is now arguing that the NPT does not technically expire at all, and that the only determination to be made in 1995 will be the duration for renewal of the Treaty.]

The discrimination between nuclear and non-nuclear weapons states built into the NPT is unacceptable to many Parties. Furthermore, there is little to suggest that the next ten years will bring the progress on Articles IV and VI that was envisaged when the Treaty went into effect. Certainly the case can be made that there is a need for a Non-Proliferation Treaty which not only meets the concern of these states but also the near-nuclear states that have so far refused to sign the NPT. Such a new treaty could contain, among other things, provisions for universally applied safeguards, separation of civil and military plutonium and highly-enriched uranium, and a ban on nuclear explosive testing.

A proposal for a replacement or substantially revised NPT, once initiated, would put considerable pressure on the Nuclear Weapons States. Either they would have to make the NPT more attractive by fulfilling their obligations under Article VI, or they would have to participate in negotiations for a replacement treaty that, among other things, would establish a specific timetable for Article VI compliance (i.e., conclusion of a Comprehensive Test Ban Treaty or other arms control accords).

If the NPT is to be renegotiated or replaced in 1995 it is not too soon to initiate the task. The current NPT took nine years to negotiate, the Law of the Seas Treaty even longer.

The Third Review Conference could be a forum at which states Party seek to establish a negotiating mandate for a post-1995 NPT. This proposal could appear formally in the Final Declaration, as a resolution, or as an expression of a minority view -- perhaps of the Neutral and Non-Aligned nations.

Following the Third Review Conference, a resolution could be introduced in the First Committee of the United Nations General Assembly calling for negotiations for a treaty to replace the current NPT. Resolution 2028 (UNGA, 20th Session, 1965) could at that time be reintroduced. It was this resolution which set forth the guiding principles under which the NPT was to be negotiated. These five principles still provide a sound basis for a replacement NPT. The Nuclear Weapons States supported these principles in 1965, and would be hard pressed to find acceptable reasons for not doing so now.

The five principles in Resolution 2028 are as follows:

> 1.The treaty should be void of any loop-holes which might permit nuclear or non-nuclear Powers to proliferate, directly or indirectly, nuclear weapons in any form.
>
> 2.The treaty should embody an acceptable balance of mutual responsibilities and obligations of the nuclear and non-nuclear Powers.
>
> 3.The treaty should be a step towards the achievement of general and complete disarmament and, more particularly, nuclear disarmament.
>
> 4.There should be acceptable and workable provisions to ensure the effectiveness of the treaty.
>
> 5.Nothing in the treaty should adversely affect the right of any group of States to conclude regional treaties in order to ensure the total absence of nuclear weapons in their respective territories.

When one of my colleagues mentioned this "new NPT" proposal to Indian Ambassador Dubey in Geneva several months ago, he said he was relieved to hear that we thought we were all going to last that long. I am by no means certain that we are, but we have much to gain, and little to lose from exploring ways to improving the current NPT. In addition to the Indian ambassador, several officials of other key "threshold" nuclear states not party to the NPT have stated that their countries would seriously consider participating in negotiations for a post-1995 non-proliferation treaty.

Introduction of a Congressional joint resolution to parallel Resolution 2028 would be a significant demonstration of support by Members of Congress for a more effective non-proliferation treaty and regime. Such a "sense of the Congress" resolution could be framed as an affirmation of the US commitment to non-proliferation. We urge this committee to consider such a proposal.

Interestingly, Resolution 2028 passed the UNGA on November 19, 1965. President Reagan and General Secretary Gorbachev will begin their summit meeting on the twentieth anniversary of this historic date.

NON-PROLIFERATION TREATY PROHIBITIONS ON THE TRANSFER AND DEVELOPMENT OF NUCLEAR EXPLOSIVE-BASED DEFENSIVE SYSTEMS

Since we are here today to discuss the NPT Review Conference and the future of the non-proliferation regime, I would like to raise another issue. It is one that concerns us greatly, and prompted us to produce a legal study to examine it more thoroughly. This study, to my knowledge, represents the first analysis that examines the implications of Star Wars on the NPT.

While the legal and policy debate concerning the wisdom of the Star Wars proposals has focused on their implications for certain existing arms control or arms limitation agreements such as the Anti-Ballistic Missile (ABM) Treaty or the Limited Test Ban Treaty (LTBT), the implications of these proposals for the Non-Proliferation Treaty have been largely neglected.

Our analysis reveals that certain kinds of "Star Wars" research and/or development conducted by US allies would violate the Non-Proliferation Treaty.

The study, commissioned by Greenpeace from Washington Attorney Eldon V. C. Greenberg, concludes that the transfer by the United States to any country of any nuclear-explosive based defensive weapon system is flatly prohibited by the NPT, as is any collaborative research program with any non-nuclear weapon state aimed at developing such a weapon system. Also barred is participation in such a research program by any non-nuclear weapon state party to the treaty.

The implications of these findings are as follows:

* Collaboration between the United States and its allies (other than the UK) on research and development related to nuclear explosive-based defensive weapons is lawful neither for the United States nor its allies under the NPT.

* As a nuclear weapon state party to the NPT, the UK is also prohibited from collaboration with any non-nuclear country on a research and development related to nuclear explosive based defensive systems.

* No western European non-nuclear weapon state party to the NPT (Austria, Belgium, Denmark, West Germany, Ireland, Italy, Luxembourg, the Netherlands, Norway, Sweden) can engage in any collaborative research aimed at developing such a weapon (e.g., the X-Ray Laser).

Interestingly, this debate is not a new one. Star [illegible]ve, Dr. Edward Teller, attacked the NPT in 1968 pre[illegible]y beca[illegible]t would prevent the United States from sharing [illegible]ive nu[illegible] weapons with its allies. During NPT ratificatio[illegible]rings in [illegible] Senate, Teller urged adoption of a reservatio[illegible] the Tr[illegible] interpreting it not to "preclude the deploy[illegible] of pure[illegible]y defensive arrangements, if and when these becom[illegible]ailabl[illegible]."

President Reagan has misled the American public by che[illegible] his Star Wars program as a primarily non-nuclear de[illegible] system which will render nuclear weapons "impotent and obsolete". One technology under serious consideration, referred to as the "Excalibur", would utilize small nuclear explosions to generate missile-disabling lasers. Other nuclear explosive-based weapons are said to be under consideration for the Star Wars program.

On March 26, 1985, Secretary of Defense Casper Weinberger formally invited European Allies to participate with the United States in SDI research. While there has been no indication that the United States is specifically contemplating cooperation on SDI nuclear explosive-based technologies with its allies, neither has there been explicit exclusion of these projects. Several European leaders have stated that if they are to participate in the Star Wars research, than they must be "full partners" involved in all aspects of the program.

Even if NATO allies do not participate in the research and development phases of the Star Wars program, our analysis raises the additional question as to whether there could be any sharing of control over any weapons system ultimately developed, or transfer of knowledge and technology necessary to build an independent European defensive system.

I would urge the Committee to consider these issues as it evaluates future of the NPT, and the implications of the Star Wars program.

Mr. Chairmen, I would ask permission to submit a copy of this legal study for the hearing record.

RECOMMENDATIONS FOR THE CONGRESS

There are some important actions that the Congress could take to demonstrate its commitment to non-proliferation. There is considerable interest in US Congressional initiatives by virtually all NPT states.

For instance, passage last year of the Kennedy-Mathias amendment on the Comprehensive Test Ban to the Department of Defense Authorization legislation was frequently referenced by delegates as the only evidence of a US commitment to arms control.

The presence of several Members of Congress at the recent Groupe de Bellerive Colloquium in Geneva, mentioned earlier, sent an important signal: that non-proliferation is being taken seriously by the US Congress. This perception by the rest of the world is important, and one that I hope will not be ignored by the members of this Committee.

Let me summarize some of the steps we believe can be taken in Congress which would have an extremely positive impact on the Review Conference, and the future of the NPT:

1. Passage by the House of Representatives of HJ RES 3--which, as you know, urges the President to ratify the Threshold Test Ban and Peaceful Nuclear Explosions Treaties and to resume Comprehensive Test Ban

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negotiations--prior to the conclusion of the Review Conference. Consideration should also be given to even stronger legislative steps to achieve an end to nuclear explosive testing.

2.A Congressional delegation should request the opportunity to be on the official US delegation to the NPT Review Conference. In order to understand the pressures facing the Treaty nations, Members of Congress must observe the Third Review Conference firsthand. I cannot stress strongly enough how important this presence can be for the Members themselves, and for the concern that it will demonstrate for delegates from other nations.

3.Consideration of legislative initiatives -- such as the one mentioned above, to reaffirm the principles embodied in UN Resolution 2028 -- to bolster the prospects that the existing NPT, or an improved surrogate will continue beyond 1995.

LONGER RANGE INITIATIVES:

4.Serious review of US plutonium production, commerce, transport, and use policies, to assess their proliferation impact. We are aware that the Committee has held hearings on this subject. We would hope that new legislative approaches to restrict weapons-usable materials will result from this oversight, such as a fissile material production cut-off.

5.Increased funding levels for the International Atomic Energy Agency for its safeguards program. While safeguards inspections have their inherent limitations, limits in funding and personnel should not be the cause of these deficiencies.

6.Strengthening of restrictions to prevent diversion of plutonium and highly-enriched uranium from civilian research reactors for use in nuclear weapons. Maintenance of prohibition against use of plutonium as a fuel in commercial nuclear powerplants in the US.

7.Increased Congressional oversight of nuclear agreements of cooperation, subsequent arrangements, and sensitive materials/technology/personnel transfers. [The agreement of cooperation with China is of great concern to us, as are reports of US nuclear technicians assisting South Africa's nuclear program. These issues deserve very close scrutiny.]

CONCLUSION

Mr. Chairmen, members of the Committee, the Congress does indeed have an important role to play in ensuring a successful Review Conference. The fate of the Non-Proliferation Treaty, and more fundamentally, of efforts to halt vertical and horizontal proliferation are at a critical juncture.

Responsibility for the future of non-proliferation efforts rests largely on the shoulders of the United States, though certainly not exclusively on this country alone. The Congress can and should help to shape the direction of these policies. Without this oversight and insight, we fear that the future of this planet will be gravely threatened.

I thank you, Mr. Chairmen, for the opportunity to present our views.

Mr. BONKER. Thank you, Mr. Fersht. The chairman has taken note of your recommendation that a congressional delegation be at Geneva in early September to observe the proceedings, and he would be only too happy to designate Mr. Hyde and Mr. Levine to represent the Congress at that meeting.

Mr. Nye, you have penned a fine article in Foreign Policy magagine which appeared in the recent edition, and without objection, I would like to have that article placed in the Congressional Record.[1]

DEALING WITH NONWEAPON STATE CRITICISM

Mr. BONKER. In your opening statement, I find interesting you, obviously, have had some experience at sessions like this because you observed that diplomats from the nonnuclear weapon states will be charging the super powers with discrimination and hypocrisy, and failure of their own commitments to live up to their pledge to disarm, and you say this is necessary rhetoric and drama that will take place, and I think you are probably right.

But you say that beyond the excessive rhetoric, the charges underscore a basic long-run security problem that the two superpowers, have tended to neglect in the past, and that this could lead to failure of the NPT when it comes up for renewal in 1995. I think you send up a warning flash that we could well be in grave danger of losing the treaty in 1995 if we do not take proper steps to deal with these serious charges.

If you were representing the U.S. delegation this time around at Geneva, what might you propose that could defuse this potential problem with nonweapon states? How can we avoid what you characterize as inevitable if we do not take their charges seriously?

Mr. NYE. I think the delegation is going to be faced with the difficult position on the CTB because the administration has said it is not willing to enter into negotiations at this time on the CTB.

Mr. BONKER. But, you have also said that that is, in your judgement, a symbolic gesture, that it is not at the top of your agenda.

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[1] See article in appendix.

Mr. **Nye**. Right. I think if I were in their position, I would try to move toward ratification of the existing threshold test ban treaties and engage in scientific studies on the verification issues with the Soviets, I would also begin negotiations on reducing the thresholds in line with what we find out from these scientific studies. We should hold forth the prospect that the CTB could be a long-term objective which, as we get more information and political conditions change, might be accomplished. I would pay attention to the issue which the less developed countries have put first on their agenda, even though it is, I think, not the most important arms control issue for us.

I think the most important arms control issues for us are whether we are able to find some sort of framework which relates modernizations of strategic offensive and defensive forces, basically the relationship between the curtailment of offensive arms and the relationship of new initiatives in defense. And one would hope that the Reagan-Gorbachev summit in Geneva might begin to explore some such framework.

I would suspect that the delegation will have to point to efforts in that area to take up the freight which they will not be able to carry on the CTB issue.

DIPLOMATIC POSITION OF UNITED STATES

Mr. **Bonker**. I wonder if the U.S. delegation could find itself on the defensive given the rhetoric and the charges from many of these nonweapon states that we are not living up to our earlier commitments and that we are not taking the CBT seriously. And given the recent talks between the foreign ministers of the two superpowers, it seems like the cards are pretty much on the table. The Russians are saying nuclear disarmament is the No. 1 issue. The Americans are saying human rights in the Soviet Union is the number one issue.

And I am just wondering whether there might be an emerging political alliance that would have the United States isolated on this matter.

Mr. **Nye**. Well, I suspect that from private conversations I have had with Soviets when I was in Moscow in March, and later when I was on a panel with a top Soviet Diplomat on this issue, the Soviets realize the importance of the Non-Proliferation Treaty, and that to get in a spitting match against the United States at the Review Conference could come back to haunt them. By creating a coalition that overly isolated the United States they might at the same time do damage to the treaty.

And from private discussions I have had with the Soviets, I believe they are aware of that. That does not mean there will not be a lot of rhetoric; indeed, we will feel extremely uncomfortable at times in the conference. But I would be surprised if the Soviets pursued that to a point where they thought it was undercutting the treaty.

POSSIBLE U.S.-U.K. TREATY VIOLATIONS

Mr. **Bonker**. Mr. Fersht, one question for you, and that has to do with the statement you make on page 6, that the United States and the United Kingdom have violated the spirit of the treaty and United States law by exchanging nuclear weapons design and plutonium from civilian reactors for weapons purposes.

Could you elaborate on that? I mean, it is one thing to violate the letter of the law—we all know what that means—but a spirit seems to me to be a very subjective interpretation.

Mr. **FERSHT**. The spirit of the treaty and, I would submit, U.S. law, and that refers to research reactor fuel from Britain that was reprocessed at Savannah River which has, to my understanding, found its way into the weapons program. That is based on a GAO report, and we believe that to be in violation of the Nuclear Non-Proliferation Act.

Mr. **BONKER**. Mr. Hyde.

Mr. **HYDE**. Thank you, Mr. Chairman.

GREENPEACE INFLUENCE IN THE EASTERN BLOC

Mr. Fersht, I note in your statement you say your organization is active in 15 countries.

Mr. **FERSHT**. Yes.

Mr. **HYDE**. And I see them listed on the first page of your statement. I note that none of those countries are Eastern bloc countries or the Soviet Union.

Mr. **FERSHT**. That is correct.

Mr. **HYDE**. And, so, the influence that you are able to have does not extend to the other side of the equation which is necessary if we are to reach some agreement; is that not so?

Mr. **FERSHT**. Well, I do not think that is quite true. I would say that we have had enormous influence. One of the proposals that we circulated more than 6 months ago was that the Soviet Union, as well as the United States, initiate a moratorium on nuclear tests. I think Mr. Gorbachev's recent announcement suggests that we have, after much consultation with Soviet delegates to the conference on disarmament and to the NPT preparatory committee and the Soviet embassies here and in New York, suggests that perhaps despite our lack of an office or a representation in the Eastern bloc, we have had influence and we have brought pressure to bear to which they have responded.

Mr. **HYDE**. Well, to what do you attribute the fact that you do not have chapters in the Eastern bloc and the Soviet Union?

Mr. **FERSHT**. Well, you know as well as I do.

Mr. **HYDE**. I want to hear it from you.

Mr. **FERSHT**. Mr. Hyde, of course there are restrictions, but that has no relevance to the fact that the treaty is under serious pressure, and both the Eastern bloc and the Western bloc must—respond.

Mr. **HYDE**. You do not attribute your lack of welcome in the Eastern bloc as any hostility or adversary posture to your policies. It is just a quark of ideology or something, right?

Mr. **FERSHT**. It is a closed society and there is no question about it, and we have limited access to the Soviet public and the Eastern bloc public, but that really has no bearing on the Third Review Conference. What has bearing is what kind of representation the

United States brings to the Third Review Conference which will produce a successful outcome.

Finally, Mr. Hyde, I would like to add that despite these restrictions, Greenpeace has carried its messages of protest to the Soviet Union on two occasions in 1982, the Greenpeace ship *Sirus* sailed into Leningrad Harbor to protest Soviet nuclear explosive testing. In 1983, another Greenpeace ship, the *Rainbow Warrior,* entered Soviet waters to investigate possible illegal whaling operations. Five Greenpeace members were incarcerated for 5 days.

Mr. **Hyde**. I am curious to know why you use the pejorative term "star wars." Star wars conjures up pictures of spaceships shooting at each other and, of course, this is a strategic defense response actually, to be more accurate. Is it an effort to communicate the pejorative view that you hold of the strategic defense initiative——

Mr. Fersht.

Mr. **Hyde**. Star wars?

Mr. **Fersht**. I will say quite bluntly that we think Star Wars, or the strategic defense initiative, is a folly and will never work, and it does not enhance security of the United States or any other country, and perhaps there is some pejorative content to that term. But it is popularly characterized as the Star Wars initiative, and——

Mr. **Hyde**. It is properly characterized?

Mr. **Fersht**. I said it is commonly and popularly characterized.

Mr. **Hyde**. Oh, I am sorry.

Mr. **Fersht**. If the committee would prefer, I would be happy to strike that and replace it with the term strategic defense initiative.

Mr. **Hyde**. I far from speak for the committee. I was just expressing a little ideosyncracy of my own about opponents who persist in misnaming it.

VERIFICATION PROBLEMS

Mr. Spector, you have brought up a fascinating angle to this whole topic when you say recent developments regarding Israel's nuclear program are cause for concern. According to two reports in the Aerospace Daily since 1981, Israel has deployed nuclear armed Jericho II missiles, et cetera, et cetera.

Now, the reason I mention that is I have talked to intelligence people who have said if you ask the intelligence community how many nuclear weapons Israel has, you will get an answer from 2 to 200. Nobody really knows. The point being that in a country as small as Israel, a postage stamp, vis-a-vis the Soviet Union, a friendly country, an allied country, if we cannot and do not know anymore than we do about their nuclear capability, how in the world will we ever verify the nuclear capability, development, deployment, et cetera, of a hostile, closed society, which Mr. Fersht himself has admitted, that does not welcome people prowling around the territory? Do you not see a very serious problem in verification that is key to all of our concerns about the incinerating globe?

Mr. **Spector**. Well, first of all, I think it is fair to point out that I do not have access to the classified information and I really cannot make a judgement about how detailed our information is concerning the Israeli program. My guess is that our data is rather detailed and that somewhere in the Government there is a pretty good fix about what is going on. Perhaps there is a reluctance to publicize, even on a classified basis, some of this information, and perhaps it does not come in front of you as often as the information that we have about the Soviet Union. Therefore, you have one set of estimates, on the Soviet Union, that you find not entirely perfect versus another set of estimates, on Israel presented so infrequently, that making comparisons difficult.

I think one would assume that in the case of Israel, we have rather good information. And although itis not clear how much weight to give this new report, I mentioned earlier, it has been reiterated on television recently, with an additional expert supporting it. So I think it needs to be added to the store of possible information about the program in the public domain as we try to assess where it stands today.

Mr. HYDE. You are assuming we know more than we are saying about the Israeli nuclear program then.

Mr. SPECTOR. Well, I hope it is true that the U.S. Government knows more than it says publicly. How much we actually know——

Mr. HYDE. I wish I had the confidence you have.

Mr. SPECTOR. Well, they are not saying very much publicly, and I am sure they know a bit more than that, so one assumes there is decent information but that it has not seen the light of day very often.

CTB IMPLICATIONS

Mr. HYDE. All right, Mr. Nye, Professor Nye, there is a comment, interesting comment in this morning's Post in an editorial called Nuclear Testing. It says a comprehensive ban would blunt the technological edge that is the chief American asset in the arms control talks. Why give away through a test ban what the Soviet Union should be expected to pay for in arms reductions? This is why a ban cannot be treated as a separate option distinguishable from the proposals on the table at Geneva. Only if talks fail would a testing ban be worth considering.

Now, I know that would be rejected by Mr. Fersht. How do you feel about that statement?

Mr. NYE. I tend to agree with that Post editorial, and this is part of the reason for the view I take on the CTB.

I would also say parenthetically that while Mr. Fersht and I agree on a number of points, I would worry a bit about his proposal for an amendment which would basically write the CTB into a reviewed, or renewed treaty in 1995. Essentially the proposal which would say there be no nuclear explosions in the renewed treaty basically would be just writing the CTB into the treaty. I suspect that to do that would fall into the category I described earlier as amputating your foot to cure a hang nail. I think it would not solve the larger problem and at the same time would seriously jeopardize our renewal of the NPT.

Mr. HYDE. Sometimes use the analogy of decapitation to cure dandruff, but yours is equally as good.

Mr. NYE. Well, that is even more drastic, sir.

Mr. Hyde. Yours is very good.

THREAT OF CHEMICAL AND BIOLOGICAL WARFARE

Let me just make a parenthetical comment, and I thank the chairman for his indulgence. I cannot help but think sometimes as we delve into these very complex and very important problems of nuclear nonproliferation, and we all are plagued by the vision of the mushroom cloud and the world nuclear winter, nuclear summer, whatever season we are going to get from this horrible explosion, it is almost like we are thinking in terms of World War III as being a replay of World War II. Armies organizing, and drilling, and marching, when really subversion is the new way to take countries over, and I wonder about biological and chemical warfare, which is the real dirty secret we tend not to think about.

How do we protect ourselves from the suitcase that comes in from something that is hardly discernable, that is maybe even microscopic that can devastate countries, and we just hope there is a part of human nature, I guess, that would resist that as being beyond the pale. We can think about nuclear weapons, horrible as they are, barely think about them, but the chemical and biological warfare which may well be the—be a real problem, too, we are just impotent in terms of dealing with that. And, so, with that depressing comment, I yield back my time unless you have something to say about it.

Mr. Nye. I would like to comment on that. I think the point is extremely well taken, because sometimes we talk about the nuclear threat to the species without realizing that we really should be thinking about the high technology threat to the species. We have to think much more carefully about the relationship of nuclear weapons to deterrence of some of those other high technology threats and the difficulty of deterring either nuclear or biological threats which would come in through nonstate means.

So, there is a whole dimension here which deserves equal attention, which is often obscured as we think only about the nuclear threat to the species. Frankly, the dangers of new molecules that we do not know how to control may be an equal threat and deserves a great deal more attention than it is currently receiving.

Mr. Hyde. And the freedom and the autonomy we enjoy so blessedly in this country, and we would like everybody to enjoy, I wonder how long that can last if certain people whose mental equipment may be capable of acting in very strange ways, hostile antisocial ways, what defenses exist and what are we doing about it, how is the problem—I mean how serious is the problem, how imminent is it?

I think of Qaddafi or somebody who really hates the rest of the world, at least that part that he does not agree with, and what terrible damage could be caused and how defenseless we are, and I hope some fine minds, such as we have here today, all three of you, are giving that some thought too.

OK, thanks very much.

Thank you, Mr. Chairman.

Mr. Bonker. Thank you, Mr. Hyde.

UNITED STATES-CHINA AGREEMENT

I have just one additional question for either Professor Nye or Mr. Spector. That concerns an issue that is before the committee at the moment, our pending bilateral agreement with the PRC. And I am wondering what concern we might have about nonproliferation with respect to China's relationship with North Korea.

Mr. **Nye**. I will make a quick comment and then let Sandy comment. As I mentioned in my testimony, while there are some difficulties with the agreement with the PRC, I think it is wise to go ahead with it.

When I was in charge of this policy area in the Carter administration, we wrestled with some analogous problems. One is always faced with hard trade-offs, but I think rather than some of the niceties of the language which concerned the committee yesterday, one should ask the larger question of whether you are moving forward toward your larger objective of stemming proliferation.

Having China inside the tent is better than having China outside the tent, particularly when it comes to dealing with difficult cases like the case of North Korea.

Mr. **Bonker**. I wish I would have thought of that having China inside the tent rather than outside the tent.

Mr. Spector.

Mr. **Spector**. I have no information pointing to the connection between the two countries, but this revelation about a reactor being constructed in North Korea, makes one wonder where some assistance may have come from and if there is a possible connection with China. And it would certainly be a source of concern.

I would partly agree with what Dr. Nye said about the agreement as a whole. The change in Chinese behavior since the negotiations began has really been quite substantial and certainly should weigh heavily in the committee's consideration of the accord.

The one area where I thought the agreement might be somewhat troubling was in its verification mechanisms, and I would hope that as the committee explores that aspect of it. There might be some device or mechanism found for improving the verification aspects of the accord without necessarily rejecting it. Perhaps a special instruction to the NRC that in granting export licenses to China, it should favor installations that already are under IAEA safeguards or something of this kind. This might be a way of beefing up the verification mechanisms without rejecting the accord as such.

CRISIS PREVENTION MEASURES

Mr. **Bonker**. Mr. Nye, just finally, in your article you talked about the shaky political conditions in many of these countries that are on the abyss of nuclear weapons production and what that might represent in areas of instability. You also talked about the shortage of advanced electronic safety locks and secure communication networks and so on and so forth to diffuse any possible misuse, accidental use of nuclear explosions.

I guess when we talk about political instability and the lack of a communication system, we could not possibly hope for a hotline between Pakistan and India, or Iran and Iraq.

Mr. **Nye**. No, but we can in our diplomacy try to encourage such ideas as mutual exchange of visits or inspectors. One of the things that we have to do in our diplomacy in South Asia is to try to improve Indo-Pakistani relations, including such ideas as allowing people to visit each other's plants and do other things that might reduce the sense of insecurity that drives them now.

Mr. **Bonker**. Well, should not the superpowers set examples in this regard?

Mr. **Nye**. Indeed. In fact, one of the recommendations in this book that I mentioned, "Hawks, Doves, and Owls," is not only to improve both the hotline capabilities, but to extend them to all five countries with nuclear weapons and to hold regular crisis prevention talks between the United States and the Soviet Union. So, there are lots of things that we could be doing.

Mr. **Bonker**. "Hawks, Doves, and Owls."

Mr. **Nye**. I will explain it to you later, sir.

Mr. **Bonker**. No, I think it is quite self-explanatory.

Well, thank you very much for your testimony. I am sorry that more members are not here to benefit from what you have to say, but on the last day of the session before we go into recess, it is like this for hearings, although the record is being developed and it will be helpful to us and hopefully to the administration.

Thank you.

Mr. **Nye**. Thank you.

Mr. **Bonker**. I would like now to call to the witness table very patient representatives of the administration: The Honorable Richard Kennedy, who is our Ambassador-at-large and resident expert at State on nuclear nonproliferation, and also Lewis A. Dunn, who is Assistant Director for Nuclear and Weapons Control, the Arms Control and Disarmament Agency.

DESCRIPTION OF U.S. DELEGATION TO CONFERENCE

Welcome, gentlemen. Ambassador Kennedy, as you are preparing to address the committee, it would be helpful to know how our delegation is constituted at this conference, who is going to head the delegation, what departments are represented and whether policy is formulated on an interagency basis here or whether it is done on the spot once we arrive in Geneva.

Ambassador **Kennedy**. Let me very briefly address that. I know that Ambassador Dunn is going to comment on more detail on it. But simply, Mr. Chairman, the delegation will be headed by the Director of the Arms Control and Disarmament Agency, and Mr. Dunn will be his deputy. I am principal adviser to the delegation, and the delegation will comprise a number of personnel from the departments and agencies of government, all of whom are concerned.

It is anticipated that there will be Members of Congress invited to be observors, who will be kept fully and currently informed as to activities at the meeting, and will be available to give advice indeed, and to learn what is going on and our policy formulation.

As to your question about how policy is being established, there has been an interagency process over the past 2 years in preparation for the upcoming conference, and that has been led by Ambassador Dunn. The Department of State, of course, has been directly and fully aware and participating in that process.

But I will leave, if I may, a more detailed description of precisely how that process has worked and the various steps in to Mr. Dunn in his testimony.

Mr. **Bonker**. Thank you.

STATEMENT OF HON. RICHARD T. KENNEDY, AMBASSADOR-AT-LARGE

Ambassador **Kennedy**. If I may, Mr. Chairman, we appreciate this opportunity to come before the subcommittees, and to discuss our preparations for and participation in the Non-Proliferation Treaty and the Non-Proliferation Treaty Review Conference. This is a conference that the Department of State has been most involved, heavily involved in, during the preparations for it, and which we will continue to be involved as the events unfold.

U.S. ACTION TOWARD NONPROLIFERATION

I can assure you that the Secretary of State, Mr. Shultz, places great significance on the Review Conference, as we indeed do on the treaty itself. And as I have mentioned in keeping with tradition, the Arms Control and Disarmament Agency has taken the lead in the preparations, and the Director of ACDA will head the delegation.

Over the past 5 years, the Reagan administration has worked effectively to put in place a defense in depth against the spread of nuclear weapons. To prevent nonnuclear weapons states from acquiring nuclear explosives, we have cooperated with other suppliers to tighten export controls and supplier guidelines.

Steps have also been taken to reinvigorate our security alliances and ties with threatened countries, thereby hopefully lessening the possible motivations to acquire nuclear explosives.

Not least we have made major efforts to strengthen key institutions, in particular the International Atomic Energy Agency, and have worked to expand the participation in and and effectiveness of the relevant treaties such as the Non-Proliferation Treaty and the Treaty of Tlatelolco.

Now more than 15 years old, the Non-Proliferation Treaty is a focal point of global efforts to prevent the spread of nuclear weapons. It contributes to that goal in any number of ways. Under its provisions, more than 125 countries, and I emphasize that number, 125 countries have renounced the right to acquire nuclear weapons.

They have thereby demonstrated to their neighbors and others their peaceful nuclear intentions, and have helped strengthen the perception around the globe that a world of many nuclear powers is not inevitable as Mr. Nye earlier mentioned.

In addition, the international safeguards that are called for in the treaty provide confidence that nuclear material and equipment provided for peaceful uses are not misused.

The Reagan administration has taken steps to strengthen this important treaty, and I would like briefly to touch on some of these steps. Under article I, the United States as a nuclear weapons state is obligated not to transfer nuclear weapons to any country or to assist any nonnuclear weapons state to acquire nuclear explosives.

We have met that obligation. We have tightened our own export control procedures to ensure that U.S. nuclear exports are consistent with that objective.

Article III set up the system of safeguards and obligates suppliers which are parties to the treaty to require safeguards on their nuclear exports. In that connection, the United States has sought to convince other major nuclear suppliers to require comprehensive safeguards as a condition of supply for significant nuclear exports.

This requirement, if broadly adopted, would tend to reduce any discrimination with respect to the application of safeguards which might otherwise occur in favor of nonparties to the treaty. The rules would be the same for both parties and non-parties.

In addition, we have played a leading role in efforts to upgrade the nuclear supplier trigger list which derive from the Non-Proliferation Treaty, including those which pertain to enrichment and reprocessing equipment.

To strengthen the Non-Proliferation Treaty, the Reagan administration also ratified an agreement with the IAEA implementing the U.S. offer to accept voluntarily IAEA safeguards on all U.S. peaceful nuclear activities except those with direct national security significance. Acceptance of such safeguards helps to lessen the appearance of discrimination between nuclear and non-nuclear weapon states under the treaty.

Consistent with article IV of the treaty, the Reagan successful and widely adhered to arms control treaty in history.

U.S. EXPECTATIONS OF REVIEW CONFERENCE

Let me turn briefly now more specifically to the upcoming Review Conference itself. In 1980, despite the fact that nearly all countries reaffirmed their support for the treaty, some observers characterized the conference as a failure because it did not reach agreement on a substantive final document.

We are prepared for and desirous of working with all of the conference participants cooperatively to achieve such a document to summarize the results of this conference. But in our view, what matters at this conference is not what type of document results, but that the parties cooperatively take stock of how well the treaty has worked. A fair and balanced review is our goal.

In preparing for the Review Conference, the United States has undertaken extensive consultations with other governments in capitals, in New York and in Geneva. I would add that these were coordinated by and in fact carried out in large measure by Dr. Dunn.

And throughout those consultations, we have stressed the vital security benefits that the treaty provides as well as our commitment to strengthening the treaty as a foundation for the peaceful uses of nuclear energy.

We have also sought to make clear the continued strong U.S. commitment to achieving deep reductions in nuclear weapons with the goal of eventual elimination of those weapons. But we have also argued that we should not allow disappointment over limited success achieved under article VI to overshadow the benefits of the treaty as a whole.

Our preparations also have entailed careful examination of ways to use the Review Conference to strengthen the overall nonproliferation regime. Others have proposed also potential initiatives which we have carefully considered.

But it is important to remember that not all of our nonproliferation goals can best be served by ideas pursued in the context of a single 4-week diplomatic gathering. We must not be unrealistic about what this conference can accomplish.

With the Review Conference less than 1 month away, we are not complacent. We are fully aware that there will be difficult issues to discuss and questions answered. Neither are we pessismistic. We do not agree with those who write of crisis of the Non-Proliferation Treaty.

The Non-Proliferation Treaty in fact has been a genuine success. Countries continue to join, demonstrating the the norm of nonproliferation remains strong, and that momentum is with the treaty. But numbers alone are only one measure of the treaty's success.

Mr. BERMAN [chairing]. Ambassador Dunn, we have your entire statement, and we are very interested in hearing your summary of that statement. We do have both the State Department authorization and the South Africa conference committee legislation coming up fairly soon. So if you could summarize it, it would be helpful. Because we do have some questions that we would like to ask both of you before we conclude the hearing.

STATEMENT OF HON. LEWIS A. DUNN, ASSISTANT DIRECTOR FOR NUCLEAR AND WEAPONS CONTROL, ARMS CONTROL AND DISARMAMENT AGENCY

Mr. DUNN. Thank you, Mr. Chairman. I will summarize my statement. Because it is, as you imply, a rather extensive statement, and I would submit the whole statement for the record.

Mr. BERMAN. It will be included.

Mr. DUNN. Over the past 2 years, I have spent a large part of my time on preparations for the upcoming review of the treaty on the nonproliferation of nuclear weapons as the U.S. coordinator and as the chairman of the Interagency Backstopping Committee.

During the conference, as Ambassador Kennedy stated, I shall be the deputy head of the U.S. delegation. Let me note here that several Members of Congress and Senators plan to come to the Non-Proliferation Treaty Review Conference. We plan to afford them every opportunity for a successful visit similar to the arrangements for congressional observers to the Geneva arms control talks.

PREPARATIONS FOR REVIEW CONFERENCE

As Ambassador Kennedy also noted in response to Congressman Bonker's question, there are interagency preparations underway for the Review Conference. These preparations, going on now for the better part of 2 years, have included some of the following: Preparation of a basic strategy, development of position papers on key issues, the search for new ideas which could strengthen the treaty, the effort to increase adherence to the treaty, and now we are in the final process of beginning to put together instructions for the Review Conference delegation.

U.S. OBJECTIVES AT REVIEW CONFERENCE

From the perspective of the United States, there are two broad objectives which we would like to see achieved by the Review Conference. First, we believe that the Conference should reaffirm the parties' support for the treaty as a vital contributor to their own security and well-being.

Second, we believe that the Conference should try to identify ways to strengthen the overall nonproliferation regime and the treaty, but without amending the treaty's terms or attaching protocols to it.

We believe that there are many ways that such a substantive outcome can be reflected. We do not believe that we should measure the success of the Conference, however, by what kind or even whether a final document is produced.

Over the past 2 years, the United States has taken a variety of steps in pursuit of these objectives. We have stressed our readiness for a full review of all articles of the treaty, and that includes article VI which is an important part of the treaty.

We have emphasized the need for fairness and balance. That is while we must be honest about where less progress has been made than hoped in achieving the treaty's goals, we must also not overlook the Non-Proliferation Treaty's overall success.

We have pointed to the enduring security benefits provided by this treaty as well as to its essential contribution to making available the benefits of the peaceful atom. We have urged a sense of realism. The Conference should seek ways to strengthen the nonproliferation regime, but we also need to be practical about what is possible.

We have sought to foster a spirt of cooperation and acknowledgment that all of the parties have a stake in this arms control success.

Finally, in pursuit of this basic strategy, we have undertaken broad consultations with our allies, with the Soviets and their allies, and with the neutrals and nonaligned.

Over the past 1½ years, there have been three meetings of a multinational committee to prepare for the review. The meetings of this committee have been cooperative and constructive. On several occasions when a confrontation could have occurred, compromises were reached.

DIFFERENT VIEW OF ARTICLE VI

Nonetheless, we cannot be complacent and are not. Difficult questions lay ahead, and there will be tough language used. In particular, there is little doubt that implemention of article VI of the treaty, which requires negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, will be the most contentious issue at the 1985 Review Conference.

The United States shares the concern of all states that greater progress be made in efforts to control and reduce substantially nuclear arsenals. As President Reagan stressed to the United Nations last September:

> There is an urgent need for redoubled efforts to meet the legitimate expectations of all nations that the Soviet Union and the United States will substantially reduce their own nuclear arsenals. This is the best first step toward the elimination of nuclear weapons envisaged by the Proliferation Treaty. It is a step that we have been trying to pursue through the negotiations in Geneva.

We recognize the interest of many nations in movement now to a comprehensive ban on nuclear testing. Such a ban remains a long-term goal of the United States in the context particularly of deep arms reductions, improved verification, and lessened reliance on nuclear deterrence for the security of the United States and our allies.

At the same time, to make progress toward beginning to improve confidence in our capabilities to monitor and verify limitations on underground nuclear testing, President Regan just a few days ago went beyond his proposal of last September that we and the Soviets send experts to each other's nuclear testsites. He made an unconditional offer to the Soviets that its experts visit a United States testsite bringing any equipment that they deemed necessary.

ASSESSMENT OF NPT'S EFFECTIVENESS

A second major issue at the Review Conference will be an assessment of how well the Non-Proliferation Treaty has worked to prevent the further spread of nuclear weapons. Here it has been a major success. It has helped to buttress political constraints to going nuclear, to contain the growth of regional suspicions that can encourage a slide to nuclear explosives, and to make it harder for countries to cross the technical barriers to a nuclear weapon.

Not least, as has already been stressed this morning, its norm of nonproliferation has helped to create a global climate at odds with acquisition of nuclear weapons. For its part, the United States has met its obligations under articles I and II of the treaty and here, too, has sought to strengthen implementation of these treaty provisions.

In this regard, let me stress that, as President Reagan has stated, the strategic defense initiative is a research program, and will be conducted in a manner consistent with all, and I mention all, of our treaty obligations. This includes cooperation with our allies.

NPT'S BEARING ON PEACEFUL NUCLEAR APPLICATIONS

Finally, a good deal of attention at the Review Conference also will focus on the treaty's many contributions to making available the benefits of a peaceful atom to its parties. And, since 1970, when the Non-Proliferation Treaty entered into force, peaceful nuclear cooperation of all sorts has steadily expanded.

Moreover, as one of the original proponents of the Non-Proliferation Treaty, the United States has long recognized that parties to the treaty should receive special benefits in international civil nuclear cooperation. The specific record of U.S. nuclear cooperation as well as broad U.S. policy and law reflects that approach.

Let me submit for the record documentation of U.S. efforts to provide preference for Non-Proliferation Treaty parties, documentation which is being made available to all parties to the treaty in response to their request for information on implementation of the treaty.

REVIEW CONFERENCE ROLE IN STRENGTHENING NPT

The Review Conference will allow assess initiatives or other steps to strengthen the treaty. Many ideas have surfaced to date. In assessing these ideas, we will stress what we believe can make a practical contribution and be realistically pursued.

The Review Conference provides, and indeed has already provided an opportunity to intensify efforts to increase adherence to the Non-Proliferation Treaty. And as Ambassador Kennedy has noted, we have made a major effort in this regard.

But what about those significant nonnuclear weapon states that have not joined. The United States continues to urge these countries to do so, because their adherence would extend the influence of this important treaty. And we should not overlook the impact that the Non-Proliferation Treaty already has had on some of these holdouts.

Its nuclear supplier obligations hinder any efforts to acquire a nuclear explosives capability. Its spirit of preference for parties makes it harder for nonparties to gain access to the benefits of peaceful nuclear cooperation. And its norms isolate them and constrain their freedom of action.

However, we should view very cautiously proposals to amend the treaty to make it acceptable to these hard liners. The outcome is likely to be not increased adherence, but the undermining of the treaty.

FACTORS AFFECTING REVIEW CONFERENCE

By way of conclusion, the prospects for a successful Review Conference depend upon many things. The continued readiness of countries to work together cooperatively, the state of United States-Soviet relations, the Geneva talks, the effectiveness of measures to facilitate peaceful nuclear cooperation and the international political climate.

Nonetheless, in the final analysis, success as well as the health and vitality of the Non-Proliferation Treaty rests fundamentally on the assessment by each party that the treaty serves its security, political, diplomatic, and economic interests. In the view of the United States, this judgment that it does serve those interests is even more valid today than when the treaty was signed.

More important, we believe that this view is the judgment of the overwhelming majority of the parties. Taken as a whole, the treaty is a major success. In its absence, not simply the parties, but all countries would be less secure. The world would be a much more dangerous place. Thank you.

[Ambassador Dunn's prepared statement follows:]

PREPARED STATEMENT OF HON. LEWIS A. DUNN, ASSISTANT DIRECTOR FOR NUCLEAR AND WEAPONS CONTROL, U.S. ARMS CONTROL AND DISARMAMENT AGENCY

Mr. Chairman:

I appreciate this opportunity to appear before your two Subcommittees to discuss the upcoming Review Conference on the Treaty on the Non-Proliferation of Nuclear Weapons, which will take place in Geneva from August 27 through September 24, 1985. This is the third such Review Conference since the Treaty entered into force in 1970.

Treaty Goals and Objectives

The US was one of the principal drafters of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and has historically supported the goals and objectives embodied in this vital arms control agreement. The NPT has been, and continues to be, a cornerstone of international efforts to prevent the spread of nuclear weapons. This has been a fundamental national security and political objective of the United States for the past 40 years. At the same time, the Treaty establishes a framework within which nations can cooperate to obtain the benefits of the peaceful atom under strict controls to prevent its misuse for nuclear explosive purposes. Finally, the Non-Proliferation Treaty by calling on all states, particularly the nuclear weapon states, to pursue good faith negotiations to end the nuclear arms race, recognizes the parties' intent to curb the threat posed by so-called vertical, as well as horizontal, nuclear proliferation.

The specific articles of the Treaty were carefully drawn to reflect these three goals. To help prevent the further spread of nuclear weapons under Article I, the nuclear weapon states party to the Treaty undertake not to transfer nuclear explosives to any other state, and not to assist, in any way, non-nuclear weapon states to manufacture or acquire such devices. In turn, under Article II, more than 125 non-nuclear weapon states have committed themselves not to seek to acquire or manufacture nuclear explosives.

Article III obligates the non-nuclear weapon states parties to accept international safeguards on their peaceful nuclear activities, including on-site inspection by the International Atomic Energy Agency (IAEA). This Article also is one of the main legal and political foundations of the multilateral system of nuclear export controls.

Under Article IV, all parties undertake to facilitate the fullest possible exchange of nuclear equipment, materials, and scientific and technological information for peaceful purposes. Thus, nations which forswear nuclear weapons and accept safeguards, and especially less developed ones, should receive special consideration in tapping the benefits of the peaceful atom. And should there be any potential benefits of nuclear explosions for peaceful purposes, these benefits are to be made available under Article V on a non-discriminatory basis to non-nuclear weapon states parties.

Article VI commits all parties to pursue negotiations in good faith on effective measures leading to the cessation of the nuclear arms race and nuclear disarmament.

The Non-Proliferation Treaty, however, is more than its individual articles. With more than 125 parties, the Treaty also embodies a powerful international norm of non-proliferation. In the 1950s and early 1960s, it was fairly common to find references to the international "prestige" associated with developing nuclear weapons. Such references have become notable in their absence as the world community has increasingly come to regard the acquisition of nuclear weapons as illegitimate, and the spread of nuclear weapons as a serious threat to the international peace and security of all nations. Those countries suspected of having nuclear weapons ambitions are now regarded by other countries as posing a serious and undesirable threat to peace, and their nuclear efforts deplored rather than applauded.

As provided for under the Treaty (Article VIII(3)), the parties have conducted two major multilateral reviews of the Treaty's operation. We are now just a few weeks away from the third such Review Conference. Let me briefly review these past Conferences since they provide the context of our current preparations.

Past NPT Review Conferences

In 1975, the first NPT Review Conference was marked by a full, and sometimes heated, debate over how well the Treaty's goals were being met. In the end, however, the Conference produced and adopted a lengthy consensus final report which reviewed each of the Treaty articles, recommended further steps to strengthen and improve their implementation, and, importantly, reaffirmed the parties' strong support for the Treaty.

Debate at the 1980 Review Conference was difficult and contentious. This debate centered principally on Article VI and to a lesser extent on Article IV of the NPT.

Some NPT parties argued that the imposition of nuclear supplier controls -- through multilateral measures such as the 1978 London Supplier Guidelines and through unilateral measures such as the US Nuclear Non-Proliferation Act, passed that same year -- imposed excessive restraints on "the fullest possible exchange" in peaceful nuclear cooperation, and thus violated the intent, if not the letter, of Article IV of the NPT. Many NPT parties also asserted that the United States and the Soviet Union had not made sufficient progress in limiting and reducing their nuclear arsenals, and thus were not acting in good faith with respect to Article VI.

Because the 1975 Review Conference had produced a lengthy, consensus Final Document, it was assumed that the 1980 Review Conference would also produce a similar Final Document. Despite the best efforts of a number of participants, including the United States, the 1980 Conference became deadlocked and eventually concluded without producing a consensus Final Document.

Many participants and observers then argued that since the Conference did not produce such a document, it had "failed". Overlooked in the publicity surrounding this lack of a final report was the fact that the 1980 Conference had reaffirmed the parties' support for the Treaty, and called on other states to join. Significantly, the Non-Proliferation Treaty itself was not criticized, and it continued in the years ahead to gain more adherents.

US Preparations

Given the central role of the Non-Proliferation Treaty in the international non-proliferation regime, the US attaches considerable importance to the upcoming Conference. US preparations for it have been underway for nearly two years.

As in 1975 and 1980, the Arms Control and Disarmament Agency (ACDA) has taken the lead in these preparations. The Director of ACDA will head the US delegation to the Review

Conference, and I shall serve as the Deputy Head of Delegation. An interagency backstopping group has been established, which I chair in my capacity as coordinator of US preparations for the Conference. This group consists of representatives from all interested agencies, including the Departments of State, Defense, Energy, Commerce, the Organization of the Joint Chiefs of Staff, the Nuclear Regulatory Commission, Office of Management and Budget, and the National Security Council.

There are two broad objectives which the United States would like to see achieved by the Review Conference. First, we believe the Conference should reaffirm the parties' support for this vital arms control agreement and the international non-proliferation regime of which it is a key part. Second, we believe that the Review Conference should examine ways to strengthen this overall non-proliferation regime and the Non-Proliferation Treaty without amending its terms.

To achieve these objectives, the United States has adopted a strategy which stresses:

o US readiness for a review of all the goals of the Treaty;

o the importance of an honest, fair, and balanced review which evaluates the Treaty as a whole;

- the significant and enduring security benefits of the Treaty;

- the need to balance pursuit of steps to strengthen non-proliferation with a realistic approach to what non-proliferation advances the Review Conference can accomplish;

- the importance of cooperation and consensus; and

- broad consultations.

As a first step, we have made clear to other Non-Proliferation Treaty parties that the United States welcomes a full debate of all the articles of the Treaty, including Article VI. We recognize that those arms control goals are an essential part of the Treaty's vision of a safer world.

We have emphasized, as well, the need for fairness and balance. While we should be honest about where we have made less progress than hoped, we must not overlook the Treaty's successes. Thus, we have stressed that calls by the Conference for more progress in some areas should not obscure an overall assessment that the Treaty, as a whole, has served the interests of its parties.

For that reason, US diplomacy also has emphasized the many important benefits of the Non-Proliferation Treaty, particularly its significant and enduring security benefits. Its non-proliferation undertakings, including acceptance of international safeguards and inspection, have helped check regional suspicion and provided needed confidence that peaceful nuclear trade would not be misused. Its contribution to nuclear supplier restraints has made it harder for countries seeking the bomb to achieve that objective. Its norm of non-proliferation constrains the freedom of action of parties and non-parties. By checking the spread of nuclear weapons, the Non-Proliferation Treaty increases the security and stability of all states.

We have urged a sense of realism as well in addressing the various proposals that are being informally floated to implement more effectively the provisions and goals of the Treaty. A full and complete debate of these ideas is needed. Some warrant support; others present important practical difficulties, including budgetary restraint. Not least, if changes to the Treaty itself are pursued, the process could get out of control and the carefully negotiated balance of Treaty articles could be jeopardized.

In addition, over the past two years, the United States has sought to foster a spirit of cooperation, a recognition that all parties have a vital stake in the Treaty. Consequently, we have urged others to work with us to find the common ground and to promote a constructive review which strengthens, not undermines, the Non-Proliferation Treaty regime.

Finally, in pursuit of this basic strategy, we have undertaken wide-ranging and extensive efforts to consult with a broad spectrum of Non-Proliferation Treaty parties regarding the upcoming Review Conference. Over the past year, I have consulted regularly and frequently with representatives from the Western Group, both individually and in group meetings; with the Neutrals and Non-Aligned; and with the Soviets and other members of the Socialist Group. These consultations have taken place in Geneva, in many of the capitals of these parties, in New York and in Washington. Throughout these consultations, and particularly with representatives of Non-Aligned states, we have sought not only to explain our views, but also to gain a better understanding of their concerns.

Review Conference Preparatory Committee

These US preparations have been paralleled by other multilateral preparations among the Treaty parties. As was done for previous Review Conferences, a Preparatory Committee was established following consultations among NPT parties in 1983. In contrast to past Conferences, membership in this Preparatory Committee was open to all interested Non-Proliferation Treaty parties.

The Preparatory Committee has met three times in Geneva. The first session was held from April 2-6, 1984. At that meeting, the participants reviewed requirements for background documentation for the Review Conference, and decided that a number of studies should be commissioned before the next Preparatory Committee meeting. The UN Secretariat, the International Atomic Energy Agency, and the Organization for the Prohibition of Nuclear Weapons in Latin America prepared the documents for review at the second meeting.

The second meeting of the Preparatory Committee was held October 1-12, 1984. The participants considered the numerous background documents and offered suggestions for their improvement. Also at this meeting, Egyptian Ambassador Mohamed Shaker was endorsed by all groups as the candidate for the Review Conference Presidency. This stood in marked contrast to the 1980 Review Conference which opened without a President having been selected. Finally, this preparatory meeting asked all parties to provide information on the implementation of the Treaty.

The third and last meeting of the Preparatory Committee was held April 22-May 1, 1985. The Preparatory Committee agreed at that time on a provisional agenda, draft rules of procedure, and a cost-sharing formula for the Review Conference.

There also was a great deal of formal and informal exchange of views on the tasks of the Review Conference, and on possible outcomes. There was widespread agreement that the Review

Conference should undertake a full and honest assessment of how well the Treaty's goals have been met overall. It was left for the Review Conference to determine what type of substantive final declaration to seek.

For its part, the United States is fully prepared to work with the other parties to achieve a substantive Final Document, as long as a spirit of compromise prevails along with readiness to find the common ground. We remain flexible on both the form and content of such a declaration. But we do not believe that the success of the Conference can or should be measured by what kind or even whether a Final Document is produced.

The third Preparatory Committee also agreed to establish three Main Committees at the Conference. These Committees complement the plenary debate, and will carry on the detailed review of the Treaty.

Specifically, the first Committee will principally review the implementation of the disarmament and arms control provisions of the NPT; the second will review the non-proliferation and safeguards provisions, especially in relationship to international security and the peaceful uses of nuclear energy; and the third will review the operation of the Treaty's peaceful uses provisions. These three Main Committees not only reflect the three main goals of the Treaty, but this arrangement will encourage the Conference to devote more time than in the past to considering the non-proliferation and security contributions of the Treaty.

Increasing Treaty Adherence

The Review Conference has provided an impetus for intensified efforts to promote additional adherence to the Non-Proliferation Treaty. The United States has a longstanding policy of supporting universal adherence to the Non-Proliferation Treaty. In cooperation with many other countries, the United States has waged, and will continue to wage, a diplomatic campaign around the world to convince all countries to join the Treaty.

At the first meeting in April 1984 of the Review Conference Preparatory Committee, the US invited a group of Western, Non-Aligned, and Socialist countries to exchange information and coordinate efforts to increase Treaty adherence. This group has met throughout the preparatory process.

We believe these coordinated lobbying efforts by the United States and others have been partially responsible for Non-Proliferation Treaty adherence by several countries over the past year alone. We are especially encouraged by the fact that 16 countries have joined the Treaty since 1980. Their adherence is a concrete sign of the continuing vitality and momentum of the Non-Proliferation Treaty. They testify to the ever increasing recognition by the international community that Treaty membership not only endows its parties with many benefits, but also signals a state's commitment to the international non-proliferation regime. Moreover, each new party brings the Treaty closer to universality and further strengthens the norm of non-proliferation. I would like to submit for the record our current list of parties to the NPT.

As for those significant non-nuclear weapon states that have not joined, the United States continues to urge them to do so. Their adherence would extend the influence of this key institution. But we should not overlook the impact that the NPT already has on them: its nuclear supplier obligations hinder any efforts to acquire a nuclear explosive capability; its spirit of preference for parties makes it harder for non-parties to gain access to the benefits of peaceful nuclear cooperation; and its norms isolate them and constrain their freedom of action. We should view very cautiously proposals to amend the Treaty to make it acceptable to these hardliners; the outcome is likely to be not increased adherence but the undermining of the Treaty.

Key Issues for the Review Conference

The meetings of the Preparatory Committee were marked by a cooperative and constructive spirit which greatly facilitated resolution of the many Review Conference procedural issues. However, difficult substantive issues clearly lie ahead. There is no room for complacency, and we are not, as we come down the final stretch to the Review Conference.

The main task at the Review Conference will be an article-by-article review of the operation of the Treaty. Woven throughout that review and ensuing debate, there will be five major questions. First, has the Treaty strengthened the security of the parties by helping prevent the further spread of nuclear explosives? Second, how well has the Treaty facilitated cooperation in the peaceful uses of nuclear energy? Third, what has been done to bring the nuclear arms race to an end? Fourth, what can realistically be done to strengthen the NPT? And most important of all, weighing each of these considerations, has the NPT been a success?

Preventing the Further Spread of Nuclear Weapons

In the more than 15 years since its entry into force, the Treaty has enhanced global security and safety. It has helped to buttress political constraints to "going nuclear;" to contain the growth of regional suspicions that can encourage a slide toward a nuclear explosives capability; and to reinforce the technical obstacles to acquiring nuclear weapons. By strengthening the norm of non-proliferation, the continuing vitality of the Treaty has contributed to a global climate at odds with steps to seek nuclear explosives.

Since 1970, only one additional country is known to have detonated a nuclear explosive device. This success has served the security of all of the parties, indeed of all countries.

For its part, the United States, as called for by Article I, has not transferred nuclear weapons "to any recipient whatsoever", nor assisted any non-nuclear weapon state to build or acquire a nuclear explosive device. Instead, in support of this obligation we have toughened our export controls and, as I just noted, we also have sought to increase adherence to the Treaty.

Consistent with the obligations of Article III, the United States also has exported nuclear material and equipment to non-nuclear weapon states only under international safeguards. We have also cooperated with other countries to increase the effectiveness of IAEA safeguards and to upgrade the so-called "trigger lists" created to help the parties meet their safeguards responsibilities under Article III on nuclear exports. These export constraints have not hindered access by Non-Proliferation Treaty parties to the peaceful benefits of nuclear energy; they have made it harder for countries seeking a nuclear explosives capability to reach that goal.

Moreover, in recent years, the United States has refused to enter into new commitments to supply significant quantities of nuclear material or equipment to non-nuclear weapon states that do not accept IAEA safeguards on all their peaceful nuclear activities. President Reagan has urged other suppliers to adopt this policy. Agreement to such full-scope or comprehensive safeguards would help equalize the treatment of parties and non-parties to the NPT. Further, the job of the IAEA would be made easier, and greater assurance provided of peaceful purposes.

Finally, in the spirit of Article III, the United States also concluded a voluntary safeguards agreement with the IAEA in 1980. Under this agreement, the IAEA has the right to apply safeguards to all nuclear material in all US nuclear facilities, excluding only those facilities associated with activities having direct national security significance. The list of eligible US facilities provided to the IAEA includes more than 230 private and government-owned fuel cycle facilities, both reactors and other fuel cycle facilities. For practical reasons, the IAEA chose to safeguard only four facilities in 1985.

Fostering Peaceful Nuclear Cooperation Under Safeguards

As discussed earlier, considerable attention focused on Article IV at the 1980 Review Conference. By contrast, this Treaty provision is likely to be less controversial in 1985. Most of the contentious nuclear supply issues discussed in 1980 have since been resolved and there is reduced demand for nuclear power.

Moreover, there is a growing recognition that peaceful nuclear cooperation of all sorts has expanded steadily since 1970 when the Treaty entered into force. Many developing countries party to the Treaty have set out on the road to use nuclear energy for peaceful purposes.

Tens of thousands of students from developing countries have been trained in nuclear and related sciences. Dozens of these countries now have research reactors and a growing nuclear scientific establishment. Still more parties make use of radioisotopes and radiation in medicine, agriculture, and industry. Significantly, there are several developing nations such as Romania, Yugoslavia, and the Republic of Korea which already have significant nuclear power programs; others, including Egypt, Mexico, and the Philippines, are committed to that objective in the near future. And still more will follow.

Since President Eisenhower's historic Atoms for Peace message in December 1953, the United States has worked with other industrialized countries to create the needed worldwide pattern of cooperative arrangements and institutions to foster these peaceful uses of atomic energy. The non-proliferation assurances and safeguards provided by the Treaty have been essential to this expanding process.

As one of the original proponents of the Non-Proliferation Treaty, moreover, the United States has long recognized that parties to the Treaty should receive special benefits in international civil nuclear cooperation. The specific record of US nuclear cooperation as well as broad US policy reflects that approach. As part of our preparations for the Review Conference, the United States has documented this record and is making this information available to all Non-Proliferation Treaty parties in an effort to assist the work of the Conference. We would like to submit for the record this documentation, which also reflects our efforts to implement other key provisions of the Treaty.

Let me note here only a few examples. Since the 1980 Review Conference:

-- all new or amended agreements for cooperation with non-nuclear weapon states entered into by the United States have been with parties to the NPT or the Treaty of Tlatelolco;

-- virtually all US exports of enriched uranium (nearly 12 million kg) were to NPT parties;

-- virtually all nuclear export financing (totalling well over $1,000,000,000) provided by the US Export-Import Bank went to NPT parties;

-- "sister laboratory" and "joint committee" arrangements to foster technology transfer have been concluded only with parties to the NPT or the Treaty of Tlatelolco;

-- well over 90% of all Type II Fellowships (extra-budgetary) for training in areas from granted by the United States under the IAEA and totalling more than $5 million have been for NPT parties;

-- all of US-funded IAEA "Footnote A" (extrabudgetary) technical assistance projects -- 111 projects for more than $4.5 million -- have been for developing country Non-Proliferation Treaty parties; and more broadly

-- nearly $22 million was pledged to the IAEA's Technical Assistance Program, which benefits primarily developing countries, while the United States has continued to support Agency efforts to train manpower, strengthen technical infrastructure, and exchange scientific and technical data.

One of the most important ways the United States is able to fulfill its Article IV obligations and demonstrate a Non-Proliferation Treaty preference policy is by "directing" funds to Non-Proliferation Treaty parties through the IAEA. In recent years, we have noted with concern the significant cuts made by the Congress in the Administration's budget requests for US contributions to the IAEA for extrabudgetary technical assistance programs. These budget cuts restrict the extent to which the US can provide peaceful nuclear assistance to NPT parties and, thus, our ability to implement fully the peaceful uses provisions of the Treaty.

The United States also has endeavored to be a reliable and predictable nuclear supplier. We have made efforts to develop better ties with key nuclear trading partners, including Japan and EURATOM. The United States has worked in the Committee on Assurances of Supply of the IAEA for the establishment of a consensus on sound principles for nuclear trade. This, too, indicates our commitment to Article IV.

Ending the Nuclear Arms Race

There is little doubt that the implementation of Article VI, which requires "negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament" will be the most contentious issue at the 1985 Review Conference. The United States welcomes a full debate on this important Article, and is prepared to document its extensive efforts since the last Review Conference to achieve deep, equitable, and verifiable reductions of nuclear weapons, in compliance with the Treaty.

The United States shares the concern of all states that greater progress be made in efforts to control and reduce substantially nuclear arsenals. As President Reagan stressed at the United Nations last September, there is an urgent need for "redoubled efforts to meet the legitimate expectations of all nations that the Soviet Union and the United States will substantially reduce their own nuclear arsenals." This is the first step toward the eventual total elimination of nuclear weapons.

To achieve that goal, the negotiation and effective implementation of concrete agreements is needed. These agreements must be precise regarding the undertakings of parties; they must provide for equality or equivalence of forces; they must be effectively verifiable. The issues are complex and the stakes high, but we are ready to make the commitments necessary to produce such measures.

Since coming into office, the Reagan Administration has sought major reductions in the number of ballistic missiles and warheads, first in the START and INF talks and now in the new talks on nuclear and space arms underway in Geneva.

We realize that these complex issues will not be resolved quickly; yet, we are convinced that through constructive dialogue, we can reach agreements which will serve not only the security interests of the United States, but of all other countries as well.

In the nuclear testing area, the Reagan Administration has proposed discussions with the Soviet Union on improvements to verification capabilities for the Threshold Test Ban Treaty and the Peaceful Nuclear Explosions Treaty. Moreover, President Reagan in his speech last September 24 at the UNGA suggested that "we find a way for Soviet experts to come to the U.S. nuclear test site, and for ours to go to theirs, to measure directly the yields of tests of nuclear weapons." The purpose of such an exchange, the President continued, would be "to establish the basis for verification of effective limits on underground nuclear testing."

Building on this proposal, the United States announced on July 29 a new proposal which features a substantial new concrete element: an unconditional invitation to the Soviet Union for its experts to visit a US test site -- and to bring the equipment they deem necessary -- to directly measure the yield of a US nuclear test. The objective of this proposal is to take a needed first step in beginning to improve confidence in monitoring capability and compliance with testing limitations, about which both sides have expressed concern.

We recognize the great interest of many nations in movement now to a comprehensive nuclear test ban. But in the view of the United States, the highest priority should be placed now on achieving radical reductions in existing nuclear arsenals and strengthened stability. A ban on all nuclear tests remains a long-term goal of the United States in the context of improved verification; of broad, deep, and verifiable arms reductions; expanded confidence building measures; and at a time when a nuclear deterrent is no longer as essential to US and Allied security as at present.

A comprehensive test ban by itself would not reduce the threat of nuclear war because it would leave untouched existing nuclear arsenals. Making a complete nuclear test ban the litmus test of arms control also diverts energies away from those deep and meaningful arms reductions which are the true first step towards a world in which the threat of nuclear war no longer exists.

With its Allies' support, the United States has taken unilateral steps consistent with the goals of Article VI. During the past 15 years, the total megatonnage of US nuclear weapons has been reduced by nearly 80 percent, and the number of warheads by one fourth. One thousand nuclear warheads were removed from Europe [illegible] 1980; while in October 1983, NATO decided to reduce the number of nuclear warheads in Europe by another 1400 warheads. These reductions will not be affected by NATO's decision to deploy longer-range INF missiles in Europe. For each ground-launched cruise missile and Pershing II ballistic missile deployed, another nuclear warhead will be withdrawn.

Review Conference Initiatives

In addition to reviewing implementation of the Treaty's three goals, the Review Conference will assess possible initiatives or other measures to strengthen the Non-Proliferation Treaty and the overall non-proliferation regime. Some ideas that have surfaced to date include proposals to require the application of IAEA safeguards on all civil nuclear facilities in nuclear weapon states; to require a total separation of civil and military nuclear activities in nuclear weapon states; to enhance technical assistance to parties; to create a large new international fund for nuclear power programs for developing NPT parties; to ban attacks on peaceful nuclear facilities; and to agree on the principle of comprehensive or full-scope safeguards as a condition of supply.

The United States has been examining these and other proposals on their merits. Our assessment necessarily will reflect what we believe can be realistically achieved at the Review Conference, and, more importantly, what we believe could make a practical contribution to a stronger non-proliferation regime.

For example, as at previous Review Conferences, we will support efforts to reach agreement on comprehensive safeguards as a condition of nuclear supply. We also will try to use the Review to give impetus to ratification of the Convention on the Physical Protection of Nuclear Materials and to steps to enhance safeguards. And while we are unable to support the idea of a new fund for financing nuclear power projects, we will be looking at ways to increase and strengthen the preferential benefits afforded to Non-Proliferation Treaty parties.

The NPT and Global Security: Overall Success

Mr. Chairman:

The prospects for a successful Review Conference depend on many things: the continued readiness of countries to work together cooperatively, the state of US-Soviet relations, the Geneva talks, the effectiveness of measures to facilitate peaceful nuclear commerce, and the international political climate. Nevertheless, in the final analysis, success -- in particular the preservation of an effective Non-Proliferation Treaty -- rests fundamentally on the assessment by each Non-Proliferation Treaty party that the Treaty continues to serve its security, political, diplomatic, and economic interests. In the view of the United States, this judgement is even more valid today than when the Treaty was signed.

Mr. BERMAN. Thank you, Ambassador. I have some questions. But I thought perhaps, Mr. Hyde, would you like to take your shot.

Mr. HYDE. Thank you; very briefly.

NORTH KOREAN PROLIFERATION

The recent news about North Korea developing a nuclear installation is still pretty vague, but it is something to worry about. A new member of the club, and not a particularly genial benign member. I think that it is clear that the technology is either Soviet or Chinese inspired. We do not know, unfortunately, which it is.

But if the Soviet Union is the inspiration for this, we were talking to them in Geneva. We are talking to them soon when we review the Non-Proliferation Treaty. I would assume that that would be something that could be brought up with some force.

And indeed, if it is the People's Republic of China, that is something that we ought to discuss with them rather extensively. And if both of them deny any knowledge or complicity, maybe they can help us find out who is responsible.

And if they profess an indifference of the nuclear intrusion into North Korea, then we all have a real problem, do we not, Mr. Kennedy?

Ambassador KENNEDY. Mr. Hyde, first, I would not wish to comment specifically on matters which are alleged to rest on intelligence information, obviously. But let me say that we have no clear or conclusive evidence that anything that North Korea is doing in the nuclear field is being done with substantial assistance from outside. They indeed have worked for sometime in this field. Technologies are not unknown to them.

And it is, I think, feasible that they might be indeed developing whatever machine may be in process with their own technologies.

But as to your point about discussing matter with the Soviet Union, I can tell you that not only do we discuss such matters in the fora to which you referred, Mr. Hyde, but as a matter of fact, in pursuit of our nonproliferation objectives, we have established a regular series of bilateral meetings with the Soviet Union.

We have already had five such meetings. We will have yet another one this fall here in Washington at high levels with the Soviet establishment. We discuss the full range of concerns that we have with respect to the nonproliferation regime, ways to take steps each of us in his own way to further the objectives which we share.

And I will say that in this respect that we do share the same objectives in the nonproliferation field with the Soviet Union. And this is a subject, as with many others, that when it arises that we take up with the Soviet Union in fairly straightforward terms, and they with us. And this would be the type of thing that we would normally and have already discussed with the Soviet Union.

The situation, of course, with the People's Republic of China is not quite the same. We have not yet developed that kind of a relationship. But as I mentioned yesterday in testimony before the committees about the agreement that is before the committee, we visualize precisely those kinds of discussions developing.

We would like to see a climate in which, presuming as we do that they share most if not all of our specific concerns in the nonproliferation field and are increasingly moving in that direction, we would like to be able to develop a situation in which we would discuss such matters with them frankly and straightforwardly. We would believe that that is possible, and would intend to do so.

PRIMARY GOAL OF NPT

Mr. **Hyde**. May I ask either you or Ambassador Dunn, what are the U.S. objectives at the Non-Proliferation Treaty Review Conference, what kind of final document do we hope to achieve; and if we do not get a final document out of the conference, would you view it a failure?

Ambassador **Dunn**. Mr. Hyde, in 1980, the conference was unable to reach agreement on a final document. And this led many observers to argue that the Conference has failed. They argued that the Conference had failed despite the fact that in the course of the discussions at the Review Conference virtually every country that spoke stressed its commitment to the treaty and reaffirmed its commitment to the treaty.

So from our perspective, as I suggested 1 minute ago in my testimony, we do not believe that whether we have a final document or what type of a final document exists should be taken as a litmus test of whether the Review Conference has succeeded or not succeeded.

At the same time, we note that there is broad support amongst many countries to try to have some type of a final document. And for our part, as long as there is a readiness to compromise, as long as there is a readiness to try to find the common ground that exists amongst us as countries with an important stake in this treaty, we will be prepared to cooperate.

But I reiterate that from our perspective whether or not there is a final document is not a litmus test of the success. What matters is that we come together as a group of nations, review this treaty, and ask ourselves how well has it worked, and commit ourselves to make progress on all of its goals.

SPECIFIC U.S. CONTRIBUTIONS TO NPT VIABILITY

Mr. **Hyde**. If I may ask one last question, Mr. Chairman.

What specific contributions has the United States recently made to strengthen the regime of the Non-Proliferation Treaty?

Mr. **Dunn**. We have made a variety of contributions to try to strengthen the Non-Proliferation Treaty. For example, under article III of the treaty, it requires the suppliers to supply items under safeguards. We have been working over the course of the past 2 to 3 years to strengthen those safeguards, strengthen the various export controls and trigger lists designed to ensure that sensitive items and items which could have some relation to proliferation are exported under safeguards or not at all.

We have also worked in terms of our obligation under article I, which deals with our commitment not to assist any nonnuclear weapons state to require nuclear weapons. We have strengthened our export control procedures in order to make it harder that an export could unintentionally leave the United States which could help a country acquire nuclear weapons.

Under article IV, we have been working to strengthen peaceful nuclear cooperation. And let me add finally that the Reagan administration has put on the table in Geneva a broad package of arms control measures. The President continues to believe that major reductions in nuclear weapons are essential. And we have sought in this fashion to move toward the goal of the treaty of eliminating the threat posed by the existence of nuclear weapons in the world.

Ambassador Kennedy. May I add just one more point. As I mentioned in my testimony, also in direct support of the treaty, we have been over the past several years making a major effort in concert with other member parties to the treaty, notably I would add the Soviet Union, to get additional adherence to it.

And as I suggested since 1980, there have been fourteen additional parties signed onto the treaty which obviously further helps strengthen it and the base upon which it rests.

VERIFICATION AND TEST BANS

Mr. Hyde. Mr. Chairman, let me just say one more thing. You know, the proposal of this administration to open the testsite to the Soviet scientists, and bring your geiger counters and your measurement devices over, anything you want has been ridiculed by people who habitually ridicule anything that the administration says.

And you know, I think very unfairly. If the Soviet Union would open its test sites to onsite observation by our scientists, what a giant step forward toward a comprehensive test ban treaty. It just seems to be a gesture in the same line of the open skies of the Eisenhower days. Open the country up, open the testing up, as scientists are wont to do to exchange information, and data, and measurements.

And once more, it underscores the closed secretive society whose pronouncements on nuclear proliferation and arms control are to be taken on trust and on faith. And I think that if someday enough people, especially in the liberal and academic community, would understand that the rest of us are not willing to take on faith what they say, because our lives and our survival depends on it.

And it would seem to me that the gesture of saying come on in and watch what we are doing, let us do it on a reciprocal basis. Not even on a reciprocal basis. That is the part. We did not insist that we go and look at theirs, but come on in and look at ours.

It seems to me ridiculing that says more about the mind set of the ridiculers than it does about serious efforts to move toward arms control.

Do you have any comment on that?

Ambassador Kennedy. I would just add, Mr. Hyde, that first, I have agreed with everything that you have said. It is to be recalled that the first proposal which the President made was in a sense visualized as a reciprocal one recognizing, I think, precisely the point that you make.

The President has gone a step further, and said come here, we are not asking to go there. Come here and we will show you that we mean what we say. This is a genuine proposal. We are not looking for propaganda, we are looking for results.

There are serious questions about verification. We believe that those questions should be explored thoroughly in a technical sense. And then and only then can we move to a testing arrangement. And if you do not want us to go there, come here. We will still pursue this technical question. And we will show you that we have an open society, and that we have nothing to hide.

Let me add, Mr. Hyde, that we see that problem often in our discussions with the Soviets. There comes a point when discussion stops, precisely because they do not wish to be led to a point where reciprocity might enter the discussion. We are pushing that continuously farther away. But nonetheless, it is still there. There is that problem in discussing these questions with them.

Mr. **Berman**. Thank you. Just along those lines, I would like to make a couple comments regarding what Mr. Hyde said and your reaction, and then get your reaction to that.

From some of the hearings we had in connection with the passage of H.R. 3, the proposal relating to the comprehensive Test Ban Treaty and ratification of the peaceful—the other two treaties that have been signed but not ratified yet, the weight of evidence seemed to be that there is a range of testing that can take place that are beyond our present means to verify without some either in-country equipment or inspection.

But the answer that—I think the first thing to say is, number one, a major part of the comprehensive Test Ban Treaty, it does not require the United States to do unilaterally. It is asking the United States to negotiate and express its willingness and to negotiate such a treat.

But the second point that is raised is that that level of testing is so minimal that there is no logical value it has to the arms race in effect; that it does not serve any particular useful purpose for any country to engage in that kind of testing and that, therefore, more is being made of that issue by the administration in its opposition to H.R. 3 and in its refusal to submit the previously agreed to treaties for ratification than should be made of it. That even if we assume the worst and intent by the Soviet Union to engage in testing in violation of such a treaty that could not be verified by the United States by the present methods we have, that no significant altering of any balance could take place. We should not hang up on that issue.

And, added to that is the importance of that kind of a ban on testing is so important for our goals in the area of nonproliferation and dealing with these other countries. Chairman Bonker led a group of us to South America last January, and one of the issues we discussed with countries like Argentina and Brazil was the whole question of what they are doing with nuclear energy, and why have they not signed the treaty, and allowed safeguards. And the response back constantly, particularly in Argentina was who are we to talk. When we talk about proliferating, the superpowers are the greatest proliferators of all. They are proliferating into space, they are, you know, where do they come to ask us for this. There is a feeling that seriously pursuing a Comprehensive Test

Ban Treaty can take away that argument and add to our ability to bring other parties into the treaty.

I would be interested in your reaction and particularly on this question of what value testing below the threshold which we could verify would bring to any country, particularly to the Soviet Union.

Mr. **Dunn**. I would comment on the former point first, which is that, as you know, the administration believes that verification is a critical element of any arms control agreements. And, thus, to our minds, it does not make any sense to go into an agreement which is unverifiable because that sets a bad precedent.

In terms of the Threshold Ban Treaty, we do believe it continues to be unverifiable. We believe it is necessary to work with the Soviets to try to improve the verification provisions of the Threshold Test Ban Treaty. On a number of occasions in the course of the past several years, we have proposed discussions to improve the verification provisions of the Threshold Test Ban Treaty.

The President's offer in September and the President's offer just a few days ago are designed to begin to establish some confidence with regard to verifiability and the types of verification measures that could be a step toward the bringing into force of limitations, effective limitations on nuclear testing.

On the question of whether even if there is not any military significance, that is a question I think I would rather not comment directly on, but let me suggest that in our view the task we have in front of us at this point in time in the arms control field is to get on with the job of reducing nuclear weapons, to get on with negotiating agreements which will get at the threat of nuclear weapons. A comprehensive test ban will not do that. It will leave all those nuclear weapons in place.

If we accept an arrangement which is unverifiable, an arrangement under which there could be considerable uncertainties about what is taking place, then those uncertainties may have the effect of poisoning the atmosphere for the type of negotiations that are necessary.

I have been told, for example, that one estimate is that under the existing verification capabilities if we went into a comprehensive test ban, we would have approximately one ambiguous event per day. We would not know what it was. And it seems to me that if there is one ambiguous event per day, a comprehensive test ban is not going to be a confidence-building measure which turns the corner and allows us to move toward the type of reductions in nuclear weapons we want. It is going to be a confidence-eroding measure which makes it harder to get on with dealing with the real threat.

And on the——

Mr. **Berman**. Well, just following up on that, does it follow from that that the only way we can ever enter into any kind of Comprehensive Test Ban Treaty and feel secure in knowing that it is being complied with is to have a level inspection that allows U.S. observers in the Soviet Union dealing with these one a day ambiguous events, roaming at a level in that particular closed society may mean we are a very long way off from ever achieving this goal?

Mr. **Dunn**. Well, Congressman, I think that that is a question that cannot be answered at this point in time. Part of the purpose of the President's two offers has been to try to get some work going on the question of verification. And until we begin to get that work going in each other's society, until we begin to move to answer some of the uncertainties that we have, you cannot exactly say.

As to the broader point of a nuclear test ban, I would suggest, however, that verification is an important concern, but as would come as no surprise to you, from the administrative's perspective it is not the only concern. We continue to believe that as long as our security and the security of our allies depends upon nuclear weapons and testing is necessary, a test ban must remain a long-term goal.

But at least if we began to get into some of this work on verification with the Soviets, we could narrow down some of the problems.

Mr. **Berman**. All right, all right. Well, your latter comment puts this thing into a context that at least I find more comprehensible. Basically what you are saying is as long as the array—the nuclear arsenals exist and as long as our security depends on nuclear deterrent, until we have dealt with such substantial reductions in the nuclear arsenals, that our security no longer depends on the state of our nuclear deterrent, we cannot get into—we cannot for our own security reasons enter into a Comprehensive Test Ban Treaty; we have to continue testing our nuclear warheads.

Mr. **Dunn**. But we have to continue to work to produce that environment in which a test ban becomes possible. That is the reduction and that is the getting on with some of the verification issues.

Mr. **Berman**. But let us assume we could get all the verification we wanted, are you not saying that without an agreement for substantial, the substantial reductions in warheads, in launchers that are being discussed in Geneva, you—the administration does not want to enter into a treaty that would prohibit the United States from testing nuclear warheads?

Mr. **Dunn**. We believe that the context, the environment for a complete test ban is the type of environment in which there have been the type of major reductions of nuclear weapons that you talk about, the point at which we are less dependent on nuclear weapons.

Mr. **Berman**. Well, then, this is a major shift from the position of previous administrations on this issue, including the Nixon administration that negotiated these treaties which have not yet been ratified. Is that not a fair conclusion?

Ambassador **Kennedy**. I do not think it is a major shift, Mr. Chairman. Let me just say that it involves, one, the verification question; two, assurance of compliance; and, three, and it always has the consideration of whether the deterrent is being protected to the extent it needs to be.

Let me just add one additional point if I may. We should not allow ourselves to be pushed into the notion, nor should we drive others to the notion the comprehensive test ban today would represent a serious arms control measure. It would not, because the arsenals that exist would remain. The capability to continue producing into those arsenals would remain.

What is required for serious nuclear arms control measures are deep, equitable and verifiable reductions in those arsenals. Then

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you have arms control in the nuclear field. You do not have it with a test ban.

U.S. ARMS CONTROL POLICY

Mr. **BERMAN**. Well, even though we are getting a little bit beyond the scope perhaps of this hearing, that leads to this other question, and it does relate to this treaty because what article VI of the treaty states that the parties to the treaty agree to pursue negotiations to bring an end to the nuclear arms race at the earliest possible date.

So, we will always have countries pointing to us, and I would assume the administration's position is that is what is going on in Geneva right now. We are pursuing that. You have expressed very passionately the importance of this substantial reduction, and it is—it occurs to me that it is very possible that everything the administration has done over the past 4 years may in the end be the greatest contribution to meaningful arms control agreements if by virtue of the atmosphere that has been created, including the President's speech about strategic defense initiatives and all that, is taken to the table and then put on the table as part of the bargaining process, and I think even Lou Cannon just wrote a column a little while ago that we are not at that unique point where we may have the chance to obtain that kind of agreement if we are willing to negotiate a way, in a verifiable fashion, the testing and the deployment of this strategic defense initiative.

I also recognize the problem that I do not think the best place to reveal would be today at this hearing if that is your position. At the same time, the passion with which the administration has defended the necessity of moving ahead and creating this shield gives some of us concern that the appropriate flexibility will not be demonstrated at the right moment. And all of this is to say that will we be able to know the precise moment and have the flexibility to forget about past speeches and past goals in order to achieve the agreement which may be, may be coming close to a very optimal time to obtain?

Mr. **DUNN**. To paraphrase you, Congressman, I do not think that this place is the place to speculate about what positions may or may not emerge. I would just stress that we have put serious proposals on the table in Geneva, we are committed to making real progress, and we remain convinced that with a readiness on both sides to negotiate, progress can be made.

Mr. **BERMAN**. The one thing we have not heard on the table is the notion of the trade off, but let us just leave that.

Mr. **HYDE**. Would the gentleman yield?

Mr. **BERMAN**. I would be happy to yield.

Mr. **HYDE**. Thank you.

RELEVANCE OF TEST BAN TO ARMS CONTROL

You know, this notion of a Comprehensive Test Ban Treaty and Threshold Test Ban Treaty which seems to be a very important issue, I think what you are saying is that arms control comes first, not the other way around. That there are disparities, as Ambassador Kennedy has said, between the nuclear arsenals, both the

Soviet Union and ourselves, and as long as these disparities, in inventory disparities, a generational disparity, and as long as these disparities exist, it does not make sense to ban testing first. It makes sense to reduce the inventories and to narrow the generational gap so that we are at an equal level relatively, sensibly, reasonably equal level. Then ban testing so that no one is disadvantaged. But to do otherwise is stupid.

Would you comment on that, Mr. Dunn?

Mr. Dunn. I would comment that if you want to argue that what we consider to be real arms control, which is the reduction of nuclear weapons must come first, and that may provide the type of context to go into a testing ban, that is how we see it.

PREREQUISITES FOR TEST BAN

Mr. Hyde. Our intercontinental ballistic missile, the Minuteman 3, is 15 years and older. Do missiles degenerate? Do they get old? Do they deteriorate? And is that a reason for testing to see if they still work and to modernize? The Soviet Union has a modern array of intercontinental ballistic missiles; is that not true?

Mr. Dunn. That is true, and one of the reasons at this point in time we find the moratorium proposal not in our interest is not only is it an unverifiable proposal, but because the Soviet Union, over the course of the past decades, has gone into a major military modernization program of its nuclear forces, it remains important for us to modernize our forces, and that requires testing. One has to come into a context first.

Mr. Berman. Well, on that point.

Mr. Dunn. Sure.

Mr. Berman. Another way of looking at it is no, to the contrary. The best way to get the meaningful reduction in nuclear arsenals is to go with not just the comprehensive testing of—ban on testing of nuclear warheads, but the comprehensive testing of nuclear warheads and delivery systems which is very verifiable, as I understand it. That is verifiable right now today. We know when they are testing missiles. And that whatever the state of the art is in the Soviet Union right now, it is going to be a lot different in 20 years, and that if we can stop this push toward modernization on both sides in a verifiable way——

Mr. Hyde. After we catch up, if you do not mind.

Mr. Berman. Well, is that the issue? And will we catch—and is there a point where both sides are going to feel they are caught up, or is that always going to be the enemy of reaching the agreement to stop the testing so that the pursuit of modernization is frozen out and then we can start the reduction of the nuclear arsenals.

Mr. Hyde. Maybe the reductions, if they were to take place on the Soviet side, down to a level where the inventories and the generations are equal, then we would be in a marvelous position to have a test ban. But to do it before that locks in a very dangerous disparity, it seems to me. And what do we get for it?

If we were to freeze today, go into a comprehensive test ban arrangement, that would be a great advantage to the Soviet Union who is sitting with all their four or five modern generation weapons and we are playing around with Lyndon Johnson technology, our Minuteman 3, and we are not going to test any more, what are we getting for that concession on our part if we do not get reductions? I think that has to be asked.

Mr. **Berman**. Well, what if we turn the question around, what will we have gotten if we had had such an agreement 15 years ago?

Mr. **Hyde**. We would have foreclosed the new modern generation of Soviet ICM.

Mr. **Berman**. And MX missiles, and MIRV missiles, and——

Mr. **Hyde**. Terrific. The Soviets are not interested in that until they have got theirs.

Mr. **Berman**. I do not want to——

Mr. **Hyde**. Incidentally, we should patent our discussion because it is breaking up the Greenpeace gallery. They are just having a howling good time, and I am pleased to contribute to their levity.

Mr. **Berman**. Well, there is so much to be depressed about generally in this area. [Laughter.]

It is good to provide a little relief.

CHINESE PARTICIPATION IN REVIEW CONFERENCE

Going from this to a more specific area. Has China been invited to attend this review conference as an observer?

Mr. **Dunn**. China has been invited to attend as an observer. There is no specific invitation that goes to countries, but I know that various countries have raised with China the possibility that it might want to come to the review conference and observe what goes on. And we are still waiting to see what the Chinese decide.

Ambassador **Kennedy**. They are, I would add, Mr. Chairman, expressing considerable interest in what is going on. Whether they will actually come to the meeting is another question, but they are expressing great interest in what is going on and consulting rather widely, so far as we can tell, to get people's viewpoints as to the issues before the conference.

Mr. **Berman**. I did not attend the hearing yesterday because of the conference committee on South Africa, and then I missed the first panel today. But congratulations are probably in order to you for achieving what I assume is obviously to the satisfaction of the administration in terms of our proliferation concerns with respect to sales of nuclear technology to China in part preliminarily to the agreement which was signed during the President's trip here last week.

When we were in China, we got the impression from a couple of the comments that were made there by Chinese officials that you had felt when you were there that it was not so much what the Chinese were doing that was the concern, but it was more the way that Congress was behaving. And I assumed that that was a misimpression, and I just wanted to give you a change to clarify that for the record.

Ambassador **Kennedy**. I can assure you that that was not only a misimpression, but I would have to say with all due respect to my Chinese interlocutors that it was a misrepresentation, and I would be glad to tell them the same.

Mr. **Berman**. OK.

Ambassador **Kennedy**. They do understand, I can assure you, Mr. Chairman.

Mr. **Berman**. You have more confidence in the agreement that we reached than in the representations that were made to us?

Ambassador **Kennedy**. Of course. Let me just add, Mr. Chairman, that the Chinese over time became increasingly aware that the Congress plays a very important and interesting from their perspective role in the entire process.

At one point, I recall the Chinese noting to me that they have a similar process. And that the agreement, of course, would have to be put before their People's Congress, and indeed it would have to be approved by the people of China. And I thought that that was an even more complicated process than our own.

SIGNIFICANCE OF REVIEW CONFERENCE FINAL DOCUMENT

Mr. **Berman**. I would be interested in the mechanics of it. You may have spoken to this in your prepared testimony or before I got here, but I would be interested in your thoughts about the importance of actually reaching an agreement on a final document at the Review Conference.

I mean what weight should be given to our success in doing that?

Ambassador **Dunn**. In our view, whether or not we achieve a final document should not be taken as the success or failure, the litmus test of what happens at the Review Conference. What matters most is that as a group of parties to the treaty with an important stake in this treaty, that we get together, we ask how well has the treaty worked. We ask if there are ways in which the treaty and the nonproliferation regime can be strengthened. And we commit ourselves to try to ensure that the treaty overall works as well as it should.

We also understand that many countries want to seek some type of a substantive final document. As long as others are ready to compromise, to work to find a common ground, we will work with them. But it is not the determination of whether we think that the conference is a success or not.

Ambassador **Kennedy**. A fair thorough-going review of the treaty and the actions which have been taken to implement it is what our real goal is.

Mr. **Berman**. There are a number of other questions, and you have been very patient. If you would be willing to, we would like to send you some written questions for the record just to cover the whole area of inquiry. And unless there are, and there are not, any further questions, we will thank you very much for coming and adjourn the hearing.

Ambassador **Kennedy**. Thank you for your courtesy, Mr. Chairman.

Mr. **Dunn**. I would also like to submit for the record a list of the Non-Proliferation Treaty parties. It is a continuing moving object, because more countries keep joining.[1]

Mr. **Berman**. Unfortunately, not the five or six that we would like to see join the most.

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[1] See appendix 6.

Ambassador **Dunn**. Well, we work on those, too.

Mr. **Berman**. Thank you.

[Whereupon, at 12:36 p.m., the subcommittees adjourned, subject to the call of the Chair.]

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APPENDIX 1

ARTICLE BY JOSEPH S. NYE, JR., IN FOREIGN POLICY (SUMMER 1985) ENTITLED "NPT: THE LOGIC OF INEQUALITY"

NPT: THE LOGIC OF INEQUALITY

by Joseph S. Nye, Jr.

When the third conference to review the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) convenes in Geneva this September, the halls and headlines will be filled with acrimony. Diplomats from non-nuclear-weapons states will charge the superpowers with discrimination, hypocrisy, and failure to live up to their commitments to disarm. Should this drama be taken seriously? No and yes. Excessive rhetoric is a hallmark of such conferences, and it will not necessarily signify an imminent collapse of the treaty. Yet these charges underscore a more basic, long-run security problem that the superpowers have tended to neglect in recent years and that could lead to the failure of the NPT when it comes up for renewal in 1995.

In the 40-year history of nuclear weaponry two remarkable facts stand out. The first is that in a world of sovereign states in which the right of self-defense is enshrined in the United Nations Charter as well as in international law, many countries have agreed to forgo acquiring the most destructive weapons of self-defense. The second is that although nuclear weapons technology has spread somewhat over four decades, it has not spread as widely as expected. In 1963 President John Kennedy envisaged a world in the 1970s with 15 to 25 nuclear weapons states posing "the greatest possible danger." Instead, today there are about seven: five declared weapons states, one state that has exploded a nuclear device but not produced weapons, and one or two that may have produced weapons but that have not yet set off an explosion.

Nuclear reality has been less alarming than predicted for several reasons, including the restrictive policies of the weapons states; the

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calculated self-interest of many nonweapons states in forgoing nuclear weapons; and the development of an international regime of treaties, rules, and procedures that establishes a general presumption against proliferation. The main norms and practices of this regime are found in the NPT and in regional counterparts such as the Treaty of Tlatelolco, which aims to keep Latin America non-nuclear; in the safeguards, rules, and procedures of the International Atomic Energy Agency (IAEA); and in various U.N. resolutions. With a few important exceptions, the great majority of states adhere to at least some of these norms. But can such a situation last?

Some charge that the nonproliferation regime is doomed because of its discriminatory nature; they view the regime as an artificial superpower creation that must sooner or later give way to the principle of equality among states. Some countries will argue in Geneva that the policy of nonproliferation is pure hypocrisy. In the abstract, much less than in its imperfect practice, the NPT regime cannot be expected to last if this view is correct.

In the abstract, however, it is quite possible to justify nuclear inequality. Imagine that an international security conference convened without publicity and that the diplomats did not know in advance which countries they would represent. If they knew nothing of world politics today or of the probable consequences of acquiring nuclear weapons, they might reason that if sovereign states have an equal right to self-defense, then either all or none should have nuclear weapons. But if they were informed that, in current circumstances, the efforts to create either of these two conditions might significantly increase the risk of nuclear war, they may well, under certain conditions, accept nuclear inequality. Such conditions might include: the limitation of nuclear weapons use to self-defense; the unusually careful treatment of such weapons in order to reduce risk of use; some compensation for non-nuclear-weapons states that preserves their independence and benefits created by the nuclear balance of power; and concrete steps to reduce the risks—particularly to third parties—of reliance on nuclear deterrence, including weapons dismantlement when circumstances permit. In other words, the abstract justification for the uneven possession of nuclear weapons would depend on the existence of limits on ends and means, as well as on continued attention to the relative risks created by deterrence and its alternatives.

Treaties, Norms, and Taboos

In fact, the current nonproliferation regime closely resembles such an imaginary compact. Notwithstanding their equal right to self-defense, the great majority of sovereign non-nuclear-weapons states—121 to be precise—have adhered to the NPT. The treaty creates two categories of states: five that are recognized as nuclear weapons states and the rest, which promise not to follow suit. The treaty, notably, also involves two articles that imply compensation and risk reduction: Article IV, which mandates assistance in the development of peaceful uses of nuclear energy, and Article VI, which requires the nuclear weapons states to take steps toward disarmament. Moreover, in various U.N. forums the superpowers have made limited pledges not to use nuclear weapons to threaten non-nuclear-weapons states unless the latter are acting in accord with other weapons states. In this vein, during the Falkland/Malvinas war, Great Britain made no nuclear threats against non-nuclear Argentina. Nor did the United States seriously consider the use of nuclear weapons to avert its defeat by non-nuclear North Vietnam. Such behavior, of course, derived from prudence more than from U.N. resolutions. Nonetheless, it reinforces a strong taboo against using these weapons that has lasted for 40 years. At the same time, the superpowers have made little progress toward the arms reductions called for in Article VI, and some analysts argue that this "vertical proliferation" will soon justify horizontal proliferation.

But as the Vietnam example reveals, the current nonproliferation regime of treaties, norms, and taboos rests not only on formal and abstract considerations, but also on self-interest and prudence. Even though superpower compliance with Article VI of the NPT has been inadequate, many states will continue to adhere because they believe their security will be diminished if more states—particularly their regional rivals—obtain nuclear weapons. The treaty helps them by providing for international inspections by the IAEA to assure that ostensibly peaceful nuclear programs are not being used to develop weapons. And many states realize that the robust deterrence postures created by the two superpowers have discouraged many of the 40-odd states that possess nuclear technology today from building nuclear weapons. The credibility of the nuclear umbrella extended by Washington and Moscow over their allies is a major reason why proliferation has been much slower than Kennedy feared.

These calculations have not impressed the handful of major nuclear threshold countries—such as Argentina, Brazil, India, Israel, Pakistan, and South Africa—that have rejected the NPT. They consider it unacceptably discriminatory and hypocritical for the superpowers to maintain weapons denied to other states. Moreover, some analysts argue that the superpowers are wrong to try to stop others from gaining access to nuclear weapons technology. They contend that just as the existence of nuclear weapons has produced prudence that has stabilized the U.S.-Soviet relationship, the spread of nuclear weapons to other countries would stabilize regional rivals. A world of nuclear porcupines would be a more cautious world.

Other things being equal, this argument might have some merit. But other things are not equal, and contrary to the rhetoric that will be heard in Geneva, nuclear inequality has nothing to do with racism on the part of weapons states or with the irrationality that some claim to see in Third World leaders. The key difference between weapons and nonweapons states concerns the possibility that deterrence will fail. Although superpower relations and arsenals create this risk also, it is likely to be much higher in most regional situations because of the shaky political conditions found in most states seeking nuclear weapons as well as their limited experience with nuclear command and control systems. These risks are even greater in the early stages of a nuclear program, when new weapons are tempting and vulnerable targets for pre-emptive attack. The frequency of civil wars and overthrown governments in these countries, their embryonic procedures for civil control of the military, and their shortage of advanced electronic safety locks and secure battlefield communications networks all indicate that the danger of nuclear weapons use by new proliferators far exceeds that embedded in the U.S.-Soviet relationship. Nonproliferation is not an inconsistent or hypocritical policy if it is based on impartial and realistic estimation of relative risks.

For the present, most states are likely to accept some ordered inequality in weaponry because anarchic equality appears more dangerous.

Some might argue that a nonweapons state nonetheless has every moral and legal right in today's anarchic world to accept large risks. But the decision to build a nuclear weapon can impose significant new risks on third parties. If new proliferators are more likely to use nuclear weapons—even inadvertently—the breaking of a 40-year nuclear taboo becomes that much more likely, as does the chance that others might be drawn into the nuclear conflict. The inadequacies of the new proliferators' procedures for controlling weapons or weapons-usable fuels, such as plutonium or highly enriched uranium, multiply the chances that terrorists will steal nuclear devices. And finally, one must reckon with the simple but plausible proposition that the more nuclear weapons proliferate, the greater the prospects for accidental use and the greater the difficulty in eventually establishing controls and reducing the role of nuclear weapons in world politics.

Yet if the superpowers have the right to hold potential proliferators responsible for the likely effects of their actions on third parties, third countries may hold the superpowers similarly accountable. And the superpowers have not adequately fulfilled the obligations imposed on them by the nonproliferation regime. Even though the regime does not rest primarily on Article VI of the NPT, this American and Soviet failure could ultimately contribute to its collapse. Nevertheless, the key role played by their alliance guarantees in stemming proliferation indicates that their Article VI obligations cannot be interpreted as simple disarmament.

Stabilizing Deterrence

The relation between nonproliferation and other arms control regimes is not as simple as it first appears. Ironically, the superpowers have seen deterrence stabilize even as their arsenals have greatly expanded. Over time, their high levels of weaponry have instilled prudence in their relationship and permitted their allies to eschew the nuclear option. Changes in the balance that allies perceive as weakening the credibility of deterrence not only threaten the stability of the central relationship, they also reduce the sense of security that helps slow the pace of proliferation. Paradoxically, under many circumstances the introduction of a single bomb in some non-nuclear states may be more likely to lead to nuclear use than the addition of a thousand more warheads to the U.S. and Soviet stockpiles.

On the other hand, professing indifference to the superpower nuclear arms relationship can weaken the nonproliferation regime in two ways. First, a disdain for the arms control institutions and concerns expressed by nonweapons states can aggravate the discrimination issue that is a central problem in nonproliferation policy. Second, nuclear doctrines and deployments that stress the military usefulness of nuclear weapons may help bolster deterrence, but they also tend to make nuclear weapons look more attractive to others. If states that have deliberately eschewed nuclear weapons see them treated increasingly like conventional defensive weapons, they may one day reconsider their decisions. In short, the relation between nonproliferation and general nuclear arms control efforts will require the nuclear states to be sensitive to both issues.

The idea of a comprehensive test ban (CTB) treaty became the ultimate symbolic issue of the previous two NPT review conferences. But the prospect that the Reagan administration will pursue a CTB is virtually nil. The administration contends that a test ban would deprive defense planners of vital information about the reliability of the stockpile and about the effects of nuclear radiation on new systems. And U.S. officials claim to doubt that such an accord could be verified. In addition, a CTB would hinder strategic modernization plans, including some elements of the Strategic Defense Initiative (SDI).

In the absence of serious CTB negotiations, superpower hopes of defusing charges of bad faith on Article VI will depend on whether the conferees feel optimistic about the other set of talks that will be under way in Geneva—over strategic arms. The American argument that the SDI is designed to rid the world of nuclear weapons and permit the implementation of Article VI is unlikely to carry much weight in either Geneva conference. Not only have scientists' doubts about a perfect defense been widely publicized, but also many countries know that without U.S.-Soviet agreement, unilateral defensive efforts are likely to reheat the offensive arms race. But whatever the short-run situation in September 1985, a perpetual increase in superpower arsenals can soon be expected to be perceived as inconsistent with the basic intuitive compact underlying the NPT, and eventually may undercut the regime. That is the serious long-term message that should not be lost as the nuclear states properly discount the exaggerated short-term rhetoric that will blare forth from Geneva.

Vertical proliferation, however, will not be the only source of acrimony at the review conference. Regional rivalries and charges against Israel and South Africa—both NPT nonsignatories—will be raised. Some will also charge that the supplier countries have not lived up to their full obligations under Article IV to assist developing countries' nuclear energy programs. Complaints are especially likely about the Nuclear Supplier Group Guidelines, published in 1978, which urge restraint in the export of sensitive facilities and equipment such as enrichment and reprocessing plants.

But these charges can be answered impartially by adopting an evolutionary approach to energy programs. As the International Nuclear Fuel Cycle Evaluation concluded in 1980, such technologies make little economic sense for countries with modest nuclear programs. Yet they could provide capabilities that would contravene the purposes of the treaty. Such transfers to larger programs may properly be considered in the context of a region's stability and of the susceptibility of the technology to safeguards. Yet few such national programs exist, and they are unlikely to generate much friction at the conference.

Moreover, the NPT is only part of what is needed for an effective nonproliferation policy. Bilateral diplomacy, cooperation among suppliers, coordination with the Soviet Union, efforts to induce second-tier suppliers—including China—to observe the guidelines, improvements in IAEA safeguards, and studies of the sanctions best able to respond to the next case of proliferation are merely a few of the critical elements of a successful policy. But maintaining the NPT regime will remain at the heart of an effective policy.

The question still remains of how long the great majority of states possessing nuclear technology will abjure nuclear weaponry. Obviously, political and technical trends will shift over time, but the prospects that proliferation may destabilize many regions, that nuclear weapons will not enhance the security of many states, and that superpowers will not fully escape proliferation's effects all generate a strong common international interest in the nonproliferation regime. For the present, most states are likely to accept some ordered inequality in weaponry because anarchic equality appears more dangerous.

Realistically, an international regime does not need perfect adherence to have a significant constraining effect any more than domestic laws require an end to deviant behavior in order to be effective. Nevertheless, there is a tipping point beyond which the accumulated weight of violations will upset today's balance of nuclear incentives and disincentives. Moreover, the police function is traditionally the domain of the great powers in international politics. If their preoccupation with the competitive issues in their relationship distracts them from this responsibility, the proliferation balance could approach this tipping point.

The consequences of further proliferation cannot be confidently predicted. The answer depends in part on the variables "who" and "when." Stable deterrence might be possible in some regions. And the rate of spread makes a big difference. The slower the pace of proliferation, the easier it will be to manage its destabilizing effects and contain the risk of nuclear use. Still, given the dangers of increased risks of nuclear use that would follow any proliferation, it would be wise to err on the safe side and try to prevent it.

A good, impartial case can be made for a strong nonproliferation policy, but it is important to remember that the obligations bind in two directions. Although much of the rhetoric of the NPT review conference will be exaggerated and will not necessarily indicate an imminent collapse, ignoring it completely would be foolish. Hidden among the excesses will be an important message about global security in the longer term of the nuclear age.

APPENDIX 2

Article by William Epstein in August 1985 Scientific American Entitled "A Critical Time for Nuclear Nonproliferation"

A Critical Time for Nuclear Nonproliferation

(By William Epstein)

Every five years since the Treaty on the Nonproliferation of Nuclear Weapons came into force in 1970 the parties have convened to discuss how well the agreement is achieving its purpose. This month the signatories will gather in Geneva for the third time, at what will probably prove to be the most crucial meeting in the series. It is already clear that an overwhelming majority of the nonnuclear nations believe the nuclear powers, and in particular the U.S. and the U.S.S.R., have not made serious efforts to achieve arms-control agreements or reduce the size of their strategic forces and have thus failed to hold up their end of the bargain. Indeed, this conference is almost certain to be the first one confronted with a total absence of progress on nuclear arms control since the preceding review. The continued credibility—even the viability—of the treaty is therefore put in question.

The treaty (usually called the NPT) was designed to prevent both the horizontal and the vertical proliferation of nuclear weapons. Horizontal proliferation is the spread of such weapons to nonnuclear states; vertical proliferation is the further development, production and deployment of nuclear weapons by the nuclear powers.

The NPT is the cornerstone of a "nonproliferation regime" that the signatory nations have built up over some 30 years. In addition to the treaty the regime has four other main components: the International Atomic Energy Agency (IAEA), the partial-test-ban treaty of 1963, the Treaty of Tlatelolco of 1967 (creating a Latin-American zone free of nuclear weapons) and the Nuclear Suppliers Group.

The IAEA was established in 1957 to promote the peaceful use of atomic energy. The nuclear nations agreed to assist nonnuclear nations in the devleopment of the peaceful uses of nuclear energy on the condition that the nuclear material or equipment provided not be used for the manufacture of nuclear weapons. Hence the statute of the agency constitued a sort of nonproliferation bargain between the nuclear and the nonnuclear countries. At the time the U.S, the U.S.S.R. and the U.K. were the only nuclear powers. France set off its first nuclear explosion in 1960, China its first in 1964. In 1974 India exploded a "peaceful nuclear devise," which incorporates the same technology as a nuclear bomb. All six countries are members of the IAEA, together with 106 others that have not exploded nuclear devices.

The partial-test-ban treaty prohibits tests of nuclear weapons in the atmosphere, under water and in outer space. It permits undergound tests that do not create any radioactive debris outside the boundaries of the testing state. The treaty also declares that the parties seek to end "all test explosions of nuclear weapons for all time" and will continue negotiations to that end. The treaty was concluded by the three original nuclear powers and now has 112 signatories. China and France are not among them.

It is noteworthy that the U.S. and the U.S.S.R. have conducted underground tests at a higher rate since the treaty than they conducted atmospheric tests before it. Consequently the treaty has turned out to be more of an environmental and health measure than a curb on the nuclear arms race.

The Treaty of Tlatelolco probhits the signatories from making, testing, deploying or using nuclear weapons in Latin America. Cuba and Guyana are the only countries in the area that have not signed. (The treaty has 23 full parties but is not yet in force for Argentina, Brazil and Chile.) All five of the nuclear powers have signed a protocol wherein they say they will respect the treaty provisions and will not use or threaten to use nuclear weapons against the parties. This is the only treaty on nuclear weapons to which all the nuclear powers are parties, the only one that puts a legal limit on their right to make, test, deploy or use nuclear weapons and the only one forbidding such weapons in an inhabited area.

The Nuclear Suppliers Group consists of 15 nations (Western, Eastern and neutral) that seek to prevent the diversion of nuclear materials, equipment and technology to weapons. They set up restrictive export guidelines in 1974 and 1975. In 1977 a group of 66 supplies and importers, with the assistance of the IAEA, expanded discussion of the arrangements in a meeting called the International Nuclear Fuel Cycle Evaluation. The aim was to minimize the danger of the proliferation of nuclear weapons without jeopardizing the development of nuclear energy for peaceful purposes. In 1980 the expanded group concluded that no technical measures could

by themselves ensure the separation of peaceful and military applications in a way that would prevent the proliferation of nuclear weapons to additional countries. The group did envison some precautionary or ameliorative measures: the adoption of more effective and credible international safeguards and the establishment of regional organizations that might exert a restraining or deterring effect on nations edging toward nuclear weaponary. It seems clear, however, that such measures would not stop a determined nation from acquiring a capability to make nuclear weapons.

What, then, or the cornerstone of this edifice: the nonproliferation treaty? During the negotiations it was clear that both the nuclear and the nonnuclear countries wanted to prevent further proliferation. The nonuclear countries insisted on a straight-forward bargain: if they undertook to prevent horizontal proliferation, the nuclear powers must undertake to stop their vertical proliferation, the nuclear powers must undertake to stop their vertical proliferation. Accordingly the preamble to the treaty recalled the pledge of the three nuclear powers in the test-ban treaty to negotiate an end to all testing, and Article VI obligated them "to pursue negotiations in good faith on effective meaures relating to cessation of the nuclear arms peace at an early date and to nuclear disarmament."

The treaty came into force in 1970 and now has 128 parties—more than any other arms-control agreement. China and France have not signed the treaty; neither have some 40 other nations, incuding several that could make nuclear weapons now or will be able to do so soon. They include Argentina, Brazil, Indian, Israel, Pakistan, South Africa and Spain. Several of them are presumably avoiding the treaty because they have actual or potential national-security problems; others contend that the NPT is discriminatory, favoring nuclear haves over nuclear have-nots, and that in any case the provisions imposing obligations on the nuclear powers are not being carried out.

The continued refusal of some 40 counties several with a advanced nuclear programs, to become parties to the NPT tends to diminish the effectiveness of the treaty. Yet even the parties can withdraw on three months' notice. Therefore adherence to the treaty and acceptance of IAEA safeguards do not provide any absolute guarantee that a country will not at some stage decide to "go nuclear." (Under the terms of the treaty a conference must be held in 1995 to decide on the future of the treaty.)

Moreover, the treaty does not prevent nonnuclear countries from developing a capability or option of having nuclear weapons; it merely prohibits them form acquiring or making the actual weapons or explosive devices. The only conclusive proof that a country has done so in a nuclear test. A country could therefore prepare or acquire a small stockpile of plutonium or weapon-grade uranium without testing an explosive device and then begin testing after giving the required notice of withdrawal.

In the light of such possibilities the neutral and nonaligned nonnuclear countries regard a cessation of the nuclear arms race (the first obligation under Article VI of the NPT) as requiring a halt to the production, testing and deployment of nuclear weapons—in effect a freeze on nuclear weapons. Their view is that Article VI gives this objective priority over other measures of nuclear disarmament and that it is logical to stop the development of new nuclear weapons before undertaking to either reduce the number of or eliminate such weapons.

Hence these nations regard a comprenensive test ban not only as the most important first step toward ending the nuclear arms race but also as the most feasible and most easily attainable measure to halt both the horizontal and the vertical proliferation of nuclear waspons. The reasoning is that with testing forbidden the nonnuclear countries would be unlikely to commit the resources required for a weapons program and the nuclear powers would not develop new weapons. Then over a long term the deterioration of existing weapons would gradually make reliance on them less likely and their use less certain. Finally, the nonnuclear nations regard a willingness to enter into a complete test ban as a definitive test of the intentions of the two superpowers and of their will to live up to their obligations under the NPT.

From 1977 to 1980 the U.S., the U.S.S.R. and the U.K. did discuss a comprehensive test ban, but after making considerable progress they recessed the talks and have not resumed them. The reason is that the U.S. changed its position after the election of 1980, abandoning its long-time support of a ban and declaring that, although a test ban "remains an element in . . . [our] arms control objectives, we do not believe that, under present circumstances, a comprehensive test ban could help to reduce the threat of nuclear weapons or to maintain the stability of the nuclear balance."

This position did not go over well with the nonnuclear states. Their disappointment and frustration increased when the U.S. decided in 1982 not to resume the trilateral negotiations for a test ban, not only because of doubts about the verifiability of a ban but also because of a perceived need to keep testing new nuclear weapons. As the U.S. Arms Control and Disarmament Agency explained in 1983, "nuclear tests are specifically required for the development, modernization and certification of warheads, the maintenance of stockpile reliability and the evaluation of nuclear weapons effects." The UN secretary general seemed to lend support to the view of the neutral and nonaligned countries when he said earlier this year: "It is of direct importance to the future of humanity to end all nuclear explosions. No other means would be as effective in limiting the further development of nuclear weapons."

Another component of the background of the NPT review conference is the record of the two earlier conferences (in 1975 and 1980). Both of them featured an unusual alignment. Sharing common interests, the U.S., the U.S.S.R. and the U.K. cooperated in resisting the demands of the nonnuclear countries, particularly the neutral and nonaligned nations (mainly of the Third World) known as the Group of 77. (The group now has more than 100 members, but the original name persists.)

At the first conference in 1975 the participants from the Group of 77 asserted that they had fully lived up to their commitment under the NPT whereas the nuclear powers had not done so. They emphasized the failure of the nuclear powers to implement the treaty's provisions for stopping the nuclear arms race and cooperating in the peaceful uses of nucler energy.

The group made several demands, among them an end to underground testing, a substantial reduction in nuclear arsenals, a pledge not to use or threaten to use nuclear weapons against nonnuclear parties to the treaty and substantial aid to the developing countries in the peaceful use of nuclear energy. Several of the nonnuclear nations allied with the U.S. and the U.S.S.R. were sympathetic to these demands. In the end othe 1975 conference achieved a fragile consensus, expressed in a declaration in which the nuclear powers in effect promised to try harder to meet the demands of the nonnuclear countries.

In 1980, when the second conference was held, the nuclear powers had not met any of the demands. The conference failed to reach agreement on any aspect of stopping the nuclear arms race. The U.S. led the nuclear powers in refusing to make concessions on measures for the control of nuclear arms. As a result, even though the participants had achieved a consensus on plans to advance international cooperation in the peaceful uses of nuclear energy, the conference ended without a final declaration or even any formal reaffirmation of support for the NPT.

The outlook for this year's conference is as bleak or bleaker. The frustraton of the neutral and non-aligned countries appears to be turning into resentment and anger because they believe the nuclear powers have misled them. These nations will no doubt renew their long-standing demands for a comprehensive test ban, nuclear disarmament, assurances that nuclear weapons will not be used or held out as threats against nonnuclear countries and greater assistance in the peaceful use of nuclear energy. It seems clear that they will concentrate more than they did in 1980 on pressing their view that the nuclear powers must stop vertical proliferation. Indeed, many members of the Group of 77 believe that an end to vertical proliferation is the only way to stop horizontal proliferation and that both must be halted or neither will be.

In the view of that group the situation has worsened considerably since 1980. The members cite the rapid pace of the nuclear arms race; the abandonment of negotiations for a comprehensive test ban and of talks on intermediate-range nuclear weapons and on the reduction of strategic arms; the spread of the arms race to earth orbit and near space; the unlikely prospect of early progress in the resumed talks between the U.S. and the U.S.S.R. on nuclear and space-based weapons, and the escalation of global military expenditures to some trillion dollars per year. Members of the group also cite the absence of progress over the past five years on any substantive issue of nuclear arms control.

At the same time the fear of a possible "nuclear winter" has helped to create the growing demand for greater efforts to reduce and prevent the risk of nuclear war and to end the nuclear arms race. Many governments, organizations and individuals are calling for a freeze on nuclear weapons, to be followed immediately by substantial reductions in nuclear forces, and for a declaration by each of the nuclear powers that it will not be the first to use nuclear weapons.

The nonaligned countries are therefore considering new approaches to their goals of first halting and then reversing the nuclear arms race. They seem to be searching for ways to awaken the nuclear powers to the seriousness with which they regard the current situation and its impact on the proliferation problem.

One strategy under consideration relates to voting at the conference. The previous conferences operated on the basis of consensus, not purely as a matter of preference but because neither the nuclear powers and their allies nor the Group of 77 could muster the two-thirds vote needed to make a decision. In 1975 only 57 of the 96 countries then party to the treaty attended and in 1980 only 75 of 115. Most of the absentees were small nations belonging to the Group of 77. The group is therefore pressing for a larger turnout this year in the hope of assembling a two-thirds majority.

If the conference is able to muster a decisive vote, the decisions would not be legally binding on the nuclear powers or other parties to the treaty. Nevertheless, they would carry a good deal of political, moral and psychological weight. Their impact could affect the credibility of the policies of the three nuclear powers and also the viability of the NPT if the three powers failed to bring their policies into line with their treaty obligations. Some members of the Group of 77 believe their views should be put to a vote even if only a simple majority favors them.

Another scenario is envisioned by some members of the Group of 77. They would concentrate their efforts at the conference on ending the nuclear arms race and controlling nuclear arms. Discussion of such other issues as peaceful uses and international safeguards on nuclear programs and facilities and on traffic in nuclear materials and technology would be deferred or downgraded.

In a third scenario some membrs of the Group of 77 would consider walking out of the conference if it becomes clear that the nuclear powers are not ready to proceed with speed and diligence toward fashioning a comprehensive test ban and halting the nuclear arms race. A related idea is for some parties to threaten to give notice of withdrawal from the treaty unless the nuclear powers move promptly to implement their treaty obligations.

Also under consideration is the notion of not ending the conference if the discussions are fruitless. Instead the Group of 77 would call for a recess of a year or so as a means of exerting pressure on the nuclear powers to come up with positive proposals.

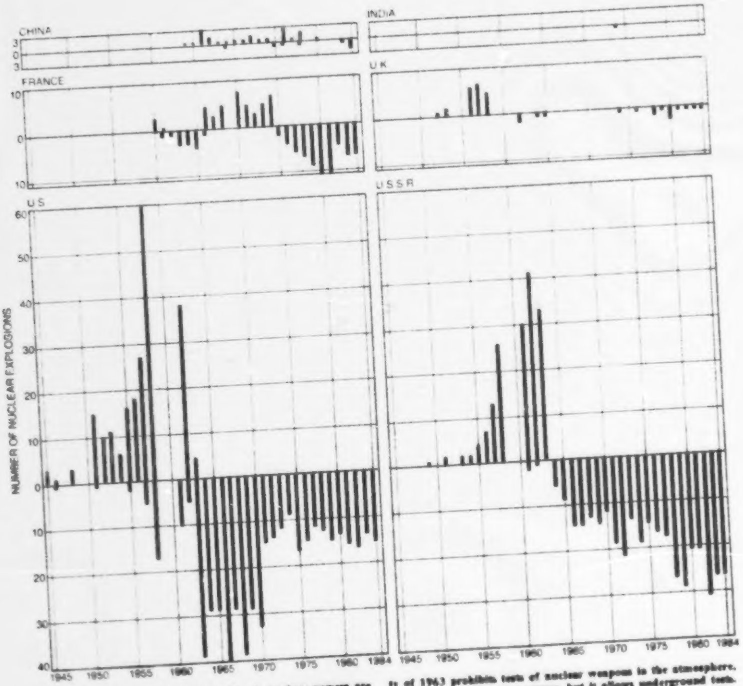
Going further, some members of the group talk of taking matters into their own hands by calling a conference to amend the test-ban treaty of 1963 in order to prevent all nuclear tests. It would only be necessary to delete the provisions that permit underground tests. The treaty stipulates that the depository governments (the U.S., the U.K. and the U.S.S.R.) "shall convene" such a conference if one-third (38 or more) of the 112 parties call for it. An amendment would have to gain the approval of a majority (57) of all the parties, including the depository governments.

One cannot suppose the nuclear powers, particularly the U.S. and the U.K., would approve an amendment prohibiting underground tests. Hence the amending conference would not create new legal obligation for the signatories. Nevertheless, majority approval of such an amendment would put considerable pressure on the three nuclear parties. A failure on their part to respond could have profound political repercussions.

How might the nuclear powers deal with the demands they will encounter at the conference? The U.S. and its allies (the Western group) appear to have no new strategies. They will probably content themselves with the policies they pursued at the previous review conferences. Doubtless they will again emphasize the importance of the treaty and stress the fact that it is in the interest of all states—nuclear and nonnuclear, large and small—to strengthen the treaty and enlarge the membership.

In addition they will probably emphasize again their willingness to expand their cooperation in the peaceful uses of nuclear energy and to provide assurances of supply to nonnuclear parties to the NPT. They will also again propose various plans for international arrangements to manage the nuclear fuel cycle better, to strengthen and improve the IAEA's system of safeguards and to make the entire nonproliferation regime more effective.

Doubtless too the U.S. and its allies will try to put a good face on the lack of progress toward halting the nuclear arms race or negotiating a comprehensive test ban. At the previous conferences they could claim some degree of movement in those directions. They cannot do so this time, but they can point to the recent resumption in Geneva of arms negotiations between the U.S. and the U.S.S.R. and to their states desire for drastic reductions in the size of the nuclear arsenals. They may also maintain that President Reagan's strategic-defense initiative (the "Star Wars" program) points the way to the elimination of nuclear weapons by rendering them obsolete.



NUCLEAR-EXPLOSIVE TESTS by the six nuclear powers are charted from 1945, when the U.S. exploded the first fission bombs, through 1984. The colored bars represent tests aboveground; the gray bars represent underground tests. The partial-test-ban treaty of 1963 prohibits tests of nuclear weapons in the atmosphere, under water and in outer space, but it allows underground tests. The 33 aboveground tests attributed to the U.S.S.R. in that year were actually carried out before the signing of the treaty in 1963.

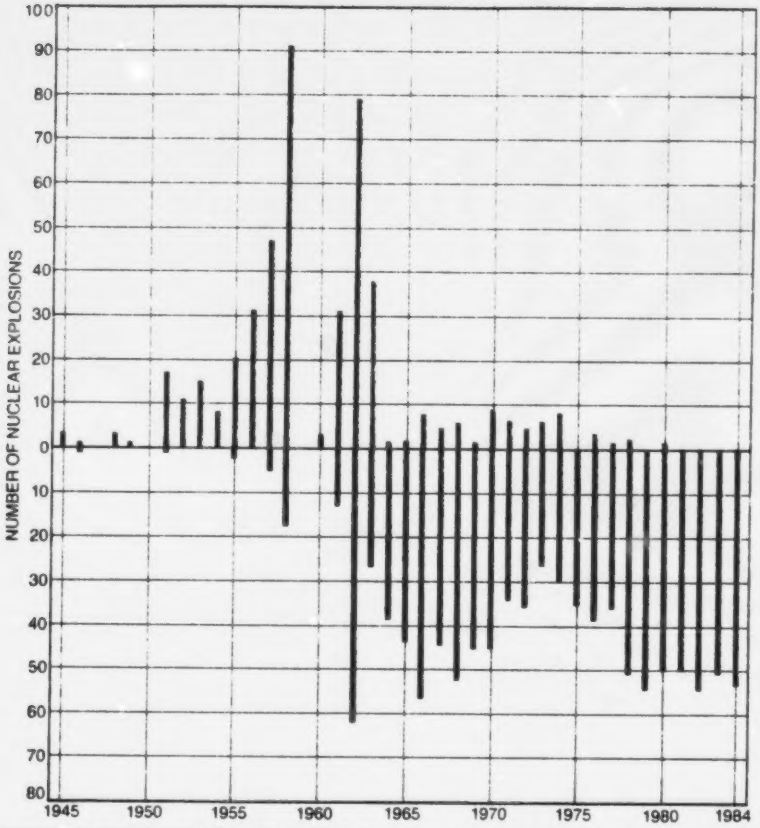
The Western nuclear powers are also hoping to achieve a consensus on a short and simple final declaration that would reaffirm the importance of the NPT in enhancing the security of all nations. The declaration would also reaffirm support for the treaty as well as the need to strengthen it with strict adherence to its obligations and goals by moving seriously toward nuclear disarmament and by providing greater assistance in the peaceful uses of nuclear energy.

The Western nations are fully aware of the demands of the Group of 77. They recognize also that the nonaligned nations are most unlikely to be satisfied with Western positions and proposals. Accordingly it seems likely that the Western nations will continue their previous reliance on a "damage limitation" strategy, wherein they will try to prevent defections from the NPT. Perhaps the best they can hope for is that the debates of the conference will proceed without undue animosity and confrontation and that the conference will end, as in 1980, without adopting any final declaration.

In aid of this strategy the U.S. initiated talks with U.S.S.R. last November to coordinate nonproliferation efforts. The two nations have agreed to hold such talks every six months. The U.S. also arranged to meet with 12 other members of the Nuclear Suppliers Group to reaffirm their policies on nonproliferation and their restrictions on the export of nuclear material, equipment and technology.

The U.S.S.R. and its allies (the Eastern group) will have an easier time at the review conference. They support a comprehensive test ban, a freeze on nuclear weapons, no first use of nuclear weapons (which is tantamount to no use against nonnuclear states) and the prevention of an arms race in outer space. In addition the U.S.S.R. will no doubt emphasize its recent agreement with the IAEA to accept safeguards over certain peaceful nuclear reactors in the U.S.S.R. (The U.S. and the U.K. had already made such an agreement.)

Some members of the Group of 77 have expressed the hope that the Eastern group might even decide to side with them, thereby ensuring a two-thirds vote for a final declaration supporting their common positions. A declaration with that level of support would give greater legitimacy to the positions and put heavier pressure on the Western group. Such an alliance seems unlikely, however, because the U.S.S.R. believes in maintaining solidarity with the U.S. on policies toward nuclear nonproliferation and strengthening the nonproliferation regime.



TOTAL NUMBER OF NUCLEAR TESTS through 1984 was 1,522, of which 461 were aboveground (*color*) and 1,061 underground (*gray*). The data were assembled by the Swedish Defense Research Institute and published by the Conference on Disarmament. Tests by the nuclear powers are China 29, France 127, India 1, U.K. 37, U.S. 772, U.S.S.R. 556.

It is noteworthy that notwithstanding the disagreements between the U.S. and the U.S.S.R. on other aspects of the arms race and arms control, both countries want to prevent the spread of nuclear weapons to more nations. Nonproliferation is the only area where the two countries have maintained a common front, whatever the current tensions between them or the current state of their relations in other fields. Still, the U.S.S.R. has the option of joining forces with the nonaligned states at the review conference in order to increase the pressure on the U.S. and the Western powers. The U.S.S.R. also has the option of abstaining on any vote, ensuring that the proposal would be adopted but would not have the formal support of the U.S.S.R.

It may also come about that the Group of 77 will round up enough supporters (without the backing of the Eastern group) to muster a two-thirds vote for a final declaration supporting the Group of 77 position. In that case the Western group would find itself in an uncomfortable and embarrassing position. Even if no declaration can be formulated and the conference ends, as it did in 1980, without a consensus, such a second failure would have a negative effect on the future of the NPT. Hence there may be considerable support for a move to recess.

Given the present position of the parties it is difficult to see how the conference can avoid a confrontation between the Group of 77 and the nuclear powers, mainly the U.S. That situation would serve not to strengthen the NPT but to weaken it, creating doubt and fear for its future effectiveness. As long as the treaty retains good credibility it exercises a restraining influence even on nonsigners who may contemplate acquiring or making nuclear weapons. Erosion of the treaty's credibility would make it easier for such countries to go nuclear. Since the treaty is the main bulwark against the future proliferation of nuclear weapons, the explosion of a nuclear device by even one or two more countries would put the entire nonproliferation regime in jeopardy.

APPENDIX 3

SCIENCE MAGAZINE, AUGUST 1985 NEWS AND COMMENT ENTITLED "SPARRING ON TEST BAN LIKELY AT NPT REVIEW"

SOME NATIONS MAY CONDITION THEIR SUPPORT FOR THE NONPROLIFERATION TREATY ON A COMMITMENT FROM THE SUPERPOWERS TO NEGOTIATE A TEST BAN

GENEVA. The surprise declaration by Soviet leader Mikhail Gorbachev that the Soviet Union will unilaterally halt nuclear testing for 5 months will complicate matters for the Reagan Administration at an international meeting, scheduled to open here on 27 August, to review the 1968 Nuclear Non-Proliferation Treaty (NPT).

Several states that have signed the NPT are expected to announce that they will continue to support the treaty only if the superpowers make a commitment to negotiate a comprehensive test ban. This attempt to link the issues of nuclear testing and nuclear proliferation is based on the complaint that the nuclear weapons states have failed to live up to a commitment, embodied in the NPT, to secure a significant reduction in the arms race.

Support for such a move is gathering momentum among many states—primarily (though not exclusively) in the Third World—who do not currently possess nuclear weapons. Some are even suggesting that they would consider withdrawing from the treaty if no commitment is made to a test ban; others argue that inclusion in the NPT of such a commitment could help persuade various "threshold" states, such as Argentina and Brazil, to become signatories.

Gorbachev's decision to halt testing is likely to add a new dimension to the political maneuvering on these issues. The Reagan Administration immediately dubbed the move a propaganda ploy and made an offer of its own for Soviet observers to to attend a nuclear test in the United States—a move that could help lay the scientific groundwork for monitoring a test ban. It also underscores the Administration's contention that a test ban could not at present be adequately verified. The Soviets have, however, called this a meaningless gesture (see box).

The United States has already made clear that it has no desire to reopen discussion on the wording of the NPT. "If changes to the treaty itself are pursued, the process of amendment could get out of control," Lewis A Dunn, assistant director of the U.S Arms Control and Disarmament Agency (ACDA), warned at a private colloquium organized in Geneva last month by the Groupe de Bellerive.

Both the United States and the United Kingdom, as well as some states that do not possess nuclear weapons, argue that the treaty represents a fragile balance of interests that would be destroyed by any alterations. In contrast, many Third World countries, both signatories and nonsignatories, argue that the benefits of the treaty are unequally distributed in favor of the weapons states. They are trying to use the treaty's undoubted importance to developed countries, in setting a framework for their nuclear exports, as leverage in bargaining for amendments.

The NPT, which has now been signed by 128 countries (although not by France or China) came into force in 1970. Its principal aim has been to prevent the emergence of new nuclear weapons states through the offer of technical assistance in the civilian applications of nuclear power to those prepared to eschew such weapons and to accept checks on their nuclear facilities.

Judged strictly within these limited terms of reference, the NPT has been a success. Hans Blix, director of the International Atomic Energy Agency (IAEA) in Vienna, described it at the colloquium as "the most widely adhered to arms control treaty of al time." No new states have declared themselves to possess nuclear weapons since the treaty was signed, even though ten countries are generally accepted to be close to the threshold of doing so.[1]

The previous review conference, held in 1980, highlighted complaints that not enough had been done to support the civilian nuclear efforts of countries that had agreed not to pursue nuclear weapons. This time around, according to Sri Lanka's Jayantha Dhanapala, the chairman of the conference's preparatory committee, attention will be focused on whether all signatories have observed Article VI of the treaty, in which they undertake "to pursue negotiations in good faith on effective measures relating to the cessation of the nuclear arms race at an early date."

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[1] The threshold states are said to be Argentina, Brazil, India, Israel, Iraq, Libya, Pakistan, South Africa, South Korea, and Taiwan, each of which is currently said to be acquiring the necessary equipment to produce nuclear weapons.

The wording is sufficiently loose to allow wide scope for interpretation. Dunn of ACDA aruges that the current arms control talks in Geneva confirm that the United States, at least, is observing this clause, and that any failure to reach agreement is due to the continuous buildup of nuclear weapons by the Soviet Union; the U.S.S.R. not surprisingly, argues in reverse that it is the posture of the United States that is holding up agreement.

Wherever the blame rests, the fact that no major progress has been achieved by the United Nations Committee on Disarmament since the NPT came into force, or in recent bilateral negotiations between the United States and the Soviet Union, is being claimed by some of the treaty's signatories as a breach of contract. Agreement on a comprehensive test ban, it is argued, is currently the most achievable way of honoring the commitment to pursue ams control.

"A comprehensive test ban is essential for the viability of NPT," says Mohamed I. Shaker, Egypt's ambassador to the United Nations, who is expected to be named president of the reiew conference. "It is both a vertical and a horizontal non-proliferation measure," a statement supported by many speakers to the colloquium, ranging form Swedish Prime Minister Olof Palme to Crown Prince Hassan bin Talal of Jordan.

David Owen, leader of Britain's Social Democrats and a former Foreign Secretary, argued that the loss of scientific data from tests would be "minuscule" when compared to "the major political gains." In contrast, both Dunn and Richard Perle, an assistant secretary in the U.S. Department of Defense, claimed that a test ban could turn out to the destabilizing, for example, by reducing confidence in weapons that could not be updated.

Among Third World speakers, however, there was a general consensus that the symoblic value of a test ban would be as important as its technical significance. "If Article VI could be changed to include a commitment to a test ban, then a good case would be made in some of the threshold states for joinging the treaty" said José Goldemberg, professor of physics at the University of São Paolo in Brazil.

"People use anti-colonialist arguments for not joining the NPT because of the resemblance to colonialism that the treaty contains. If that is removed and the treaty is made more symmetric, the case of civilian authorities in countries such as Brzail would be strengthened." Argentina and Tanzania were quoted as countries that have said they will sign if a comprehensive test ban is agreed, while both China and India have made it clear that they will not sign the NPT In the absence of such a ban.

Given that any proposal to amend the treaty will be opposed by several signatories, the most that Third World countries are hoping for is a strongly worded final declaration. Sri Lanka's Dhanapala suggests that this might even be achieved through numerical superiority, on the gounds that "it is possible that the threat of voting, or even voting itself, could change the position inside the NPT."

Even if this fails, however, the Geneva colloquium, which was organized by the Groupe de Belleriver's President, Prince Sadruddin Aga Khan, the former United Nations High Commissioner for Refugees, highlighted several more concrete, and perhaps more realistic steps that could be taken toward a test ban. These are likely to be discussed in the corridors of the review conference, if not in the open sessions. Some of these suggestions include:

The creation of an International Satellite Monitoring Agency to provide satellite-based photographic data to complement seismic observations and thus help verify any ban on testing.

Increasing the responsibility of the IAEA as the chief verification agency for future arms control agreements. IAEA director Hans Blix described the recent acceptance agreement by several weapons states, including France, the Soviet Union, and the United States, to accept IAEA safeguards on their civilian nuclear power plants as "paving the way for the type of verification which might be required in more far-reaching agreements."

A possible agreement by both superpowers to suspend nuclear testing during a brief period preceding and following the review conference. Egypt's Ambassador Shaker claims that such a gesture would signify that the two superpowers "have decided to pay more attention to the pleas of the non-nuclear-weapons states for real progress in halting and reversing the nuclear arms race."

Preliminary moves, which are not likely to enter the public spotlight until after the conference, to work toward a test ban through amendments to the Threshold Test Ban Treaty, which has been signed but not ratified by the United States. The support of 38 signatory countries is required to call an amendment conference. Promoters of this strategy feel it could offer an attractive political alternative for the Reagan Administration.

Any steps taken by the review conference toward a test ban will find some enthusiastic supporters—as well as critics—in the U.S. Congress. Senator Edward Kennedy (D-Mass.), coauthor of a resolution last year with Senator Charles Mathias (R-Md.) promoting a comprehensive test ban, told the colloquium that it was "critical that the NPT should be extended, not dismantled." In contrast, Senator Ted Stevens (R-Alaska) said that any signals from the Third World that they were not totally committed to preventing nuclear proliferation would be "counterproductive."

There were words of caution, too, from Represnetative Edward J. Markey (D-Mass.), an equally firm supporter of the test ban, who admitted in an interview that most members of Congress currently felt it was a "Low priority" at the present time. However, suggests Markey, this month's review conference will give Third World countries "a real opportunity to put some pressure on the U.S. and the U.S.S.R. to take some serious steps toward disarmament or accept the consequences."—David Dickson

REAGAN, GORBACHEV TRADE OFFERS

In a move clearly designed to influence the upcoming Nuclear Non-Proliferation review conference, the Soviet Union on 30 July promised to halt all nuclear testing for at least 5 months beginning on 6 August, the 40th anniversary of the bombing of Hiroshima. In a public announcement of the proposal, Soviet premier Mikhail Gorbachev stated that its purpose was to create "favorable conditions" for negotiations on a test ban treaty. But he noted specifically that "undoubtedly a mutual moratorium by the U.S.S.R. and the United States on any nuclear blast would be a good example also for other states possessing nuclear weapons."

The Reagan Administration, which supports a comprehensive test ban only as "a long-term policy goal," rejected the Soviet offer. Instead the President suggested that the Soviets send key scientists to the U.S. test site in Nevada, so that they could directly measure the yield of a U.S. bomb blast. The visit would enable the Soviets to calibrate the scientific equipment to reassure them that the United States adhering to the existing treaty limiting the yield of nuclear explosions to 150 kilotons. In return, U.S. officials hope to gain access to the Soviet test sites and make similar measurements.

Although the timing of the U.S. proposal made it look like a counteroffer, various officials stated that it had actually been under serious consideration since last October, as one of several options to enhance the verifiability of the treaty limiting nuclear test yeilds. "This offer, which is unconditional, is a unilateral step which clearly demonstrates the U.S. intention to go the extra mile," said White House spokesman Larry Speakes. "The Soviet experts are invited to bring any instrumentation devices that the Soviet Union deems necessary" to determine the yield of this test.

The delay may have been caused by resistance at U.S. weapons labs. Specifically, some weapons officials are concerned that the Soviets will take advantage of the open-ended nature of the offer and bring along equipment that could detect the details of U.S. bomb design. At present, for example, the United States ascertains test yields primarily by analyzing radiochemical samples taken from the cavern created by a blast. "If the Soviets did the same, they would learn a lot about the components of the bomb," says a senior U.S. weapons scientist. Instead, the labs want the Soviets to use a device that measures the shock waves created during a detonation.

No detailed policy review preceded the Administration rejection of the Soviet offer. The labs were asked what tests were planned over the next 5 months, but no effort was made to calculate the cost of returning to the present schedule once the moratorium had ended. Tests of four different warheads—destined for the Trident submarine, the MX missile, new artillery shells, and a new antisubmarine weapon—would have been delayed.

Robert MacFarlane, the President's national security adviser, asserted that the Soviets had prepared for the moratorium by stepping up their own test program. Officials at the Department of Energy are not so sure, however. "If you take [an] average of the number of tests to date you will find, in a legalistic sense, they have done more tests than the average," says one official. "But the problem is that it's this time of the year that they do most of their testing because the Soviet test sites are under snow during the winter. So they are always ramping up in May, June, July and August. You're talking about the difference of a few tests. The question you have to ask is "So what if they did four more tests this year than last? Is that a big deal or not?"—R. Jeffrey Smith.

APPENDIX 4

Report by Eldon V.C. Greenberg Entitled "Non-Proliferation Treaty Prohibitions on the Transfer and Development of Nuclear Explosive-Based Defensive Weapons

June 25, 1985

MEMORANDUM

To: Eric Fersht, Greenpeace

From: Eldon V.C. Greenberg

Subject: NPT Prohibitions on the Transfer and Development of Nuclear Explosive-Based Defensive Weapons

The purpose of this memorandum is to examine the impact of the Treaty on the Non-Proliferation of Nuclear Weapons (the "NPT" or the "Treaty") 1/ on proposals which might involve conducting collaborative research and perhaps ultimately sharing nuclear explosive-based "Star Wars" technologies with other countries. 2/ As set forth below, it

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1/ Done at Washington, London and Moscow, July 1, 1968, entered into force for the United States, March 5, 1970, 21 U.S.T. 483, TIAS No. 6839.

2/ The NPT by its terms is only applicable to *nuclear* weapons or explosive devices. Thus, while it does impact proposals to develop nuclear explosive-based defensive weapons, it has no relevance to "directed energy", "particle beam" or other weapons which do not rely upon nuclear explosions. Moreover, system components unrelated to the weapon itself, *i.e.*, fast computers, sensors, focussing devices (such as mirrors) and communications apparatus are unaffected by the Treaty. Indeed, the Treaty does not even cover non-nuclear delivery vehicles or systems, *i.e.*, ballistic missiles. *See*, *e.g.*, S.Ex.Rep. No. 9, 90th Cong., 2d Sess. (1966), in United States Arms Control and Disarmament Agency ("ACDA"), *Documents on Disarmament, 1968*, at 642, 644 (hereinafter "*1968 Senate Report*"); S.Ex.Rep. No. 91-1, 91st Cong., 1st Sess. (1969) in ACDA, *Documents on Disarmament, 1969*, at 78, 80 (hereinafter "*1969 Senate Report*").

concludes that the transfer by the United States to any country (including a nuclear weapon state within the meaning of the NPT) of any nuclear explosive-based defensive weapon is flatly prohibited by the NPT, as is any collaborative research program with any non-nuclear weapon state aimed at developing such a weapon. By the same token, the NPT would bar any non-nuclear weapon state party to the Treaty from participating in such a program.

BACKGROUND

In his March 23, 1983 television address to the Nation, President Reagan announced an initiative to develop defensive technologies which, in his words, would render nuclear weapons "impotent and obsolete". The "Star Wars" initiative (officially referred to as the "Strategic Defense Initiative" or "SDI") could involve a wide range of exotic weapons -- chemical lasers on orbiting satellite battle stations, space-based "particle beams", etc. -- to create a kind of impenetrable "shield" against offensive nuclear-armed ballistic missiles. 3/

One technology currently under serious consideration, code-named "Excalibur", utilizes small nuclear explosions to generate the energy necessary to produce lasers of sufficient

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3/ For a general discussion of possible Star Wars technologies, see Union of Concerned Scientists, The New Arms Race: Star Wars Weapons (Briefing Paper No. 5) (Oct. 1983); Union of Concerned Scientists, The Fallacy of Star Wars (1984).

strength to act as a weapons system. 4/ Other nuclear explosive-based defensive weapons may also be under consideration, including "nuclear device directed energy weapons" and "low-yield enhanced radiation neutron warheads" (the latter to be used to destroy enemy missiles after reentry into the atmosphere). 5/

4/ As described by the Union of Concerned Scientists:

> When a nuclear device is detonated, massive quantities of X-rays are produced. Scientists working on Excalibur are trying to harness these "clouds" of X-rays for the purpose of attacking enemy ICBMs. They believe this could be done by "pumping" the X-rays through lasing rods to produce focused X-ray energy beams. If these beams were produced in space, they could, theoretically, be targeted against Soviet missiles in flight.
>
> The proponents of Excalibur call for a "pop-up" deployment scheme. When an enemy missile attack appeared imminent, the U.S. would launch dozens -- perhaps hundreds -- of X-ray laser battle stations into space atop missile boosters. Each U.S. battle station would track rising Russian ICBMs with its 40-50 laser rods. This tracking would be done with information gathered by U.S. military satellites. The sensor equipment aboard these satellites would have to distinguish real missiles from decoys and transmit the data to ground stations for processing. Ground-based computers would make an immense number of calculations needed to plot the Soviet ICBM flight trajectories, and would transmit that information back to the computers onboard the battle stations. When the laser turrets were all aligned, the command would be given, the nuclear device in each weapon would explode, and the X-ray beams would deliver crippling blows to their targets. After this occurred, the battle stations would themselves be destroyed by the nuclear blasts.

Union of Concerned Scientists, The New Arms Race: Star Wars Weapons (Briefing Paper No. 5) (Oct. 1983). See also Morrison, Third Generation Nuclear Options (Center for Defense Information, Feb. 1984).

5/ In February 1985 the Secretaries of Defense and Energy signed a joint policy statement which calls for SDI-related nuclear research:

Footnote continued on next page...

One of the most sensitive issues facing the United States as it pursues the Star Wars initiative is whether and, if so, how much it can or should coordinate and collaborate with other countries, particularly its partners in the North Atlantic Treaty Organization ("NATO"). 6/ In an apparent effort to gather European support for SDI, on March 26, 1985, Secretary of Defense Weinberger formally invited European allies to participate with the United States in SDI research. 7/ While there has been no indication that the United States is specifically contemplating cooperation on SDI nuclear projects -- and perhaps it is assumed that these will be reserved to the United States -- there has likewise been no indication that such projects are necessarily excluded from the offer of cooperation, and some Europeans -- Chancellor Kohl of the Federal Republic of Germany, for one

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5 cont./ Footnote continued from previous page.

(1) To determine the feasibility and effectiveness of counterdefensive nuclear-driven systems that an adversary may develop for use against future U.S. surveillance and defensive systems.

(2) To understand the technical feasibility and impact that such concepts might have on our deterrent forces if utilized in Soviet defensive systems.

(3) To explore nuclear directed energy options as SDI possibilities if needed.

Hearings on Energy and Water Appropriations for 1986 before a Subcommittee of the House Committee on Appropriations, 99th Cong., 1st Sess. 133 (Pt. 7, 1985).

6/ See generally Broad, "Allies in Europe Are Apprehensive About Benefits of 'Star Wars' Plan", New York Times, May 13, 1985, at 1. See also "A Marketing Blitz in Western Europe", Newsweek (International Edition), June 17, 1985, at 20-21.

7/ The Washington Post, March 27, 1985, at A27.

-- have spoken of wishing to participate in the Star Wars initiative only on the basis of a "full partnership and guaranteed exchange". 8/ Further, even if NATO allies do not participate in the research and development phases of the Star Wars program, the question remains whether there could be any sharing of control over any weapons system ultimately developed and/or transfer of knowledge and technology necessary to build an independent and/or supplemental "European" defensive system.

EXECUTIVE SUMMARY

The Star Wars proposals have been highly controversial for many reasons, of both a policy and legal nature. However, while the legal debate about the wisdom of the Star Wars proposals has focussed on their implications for certain existing arms control or arms limitation agreements such as the anti-ballistic missile ("ABM") treaty or the nuclear test ban treaty, generally neglected have been the implications of these proposals for the NPT. To the extent the Star Wars initiative involves nuclear explosive-based defensive weapons, these implications are grave.

The language and history of the NPT make it clear that the Treaty bans absolutely the transfer by a weapon state and receipt by a non-weapon state of any nuclear explosive device of any sort. The Treaty admits of no distinctions based upon

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8/ The Washington Post, May 2, 1985, at A32.

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the asserted purpose of the device, whether it be "offensive", "defensive" or even "peaceful". It was understood at the time of the negotiation and ratification of the NPT that any such distinctions would be counterproductive and ultimately contribute to, rather than deter, proliferation. This understanding was made particularly clear during the United States Senate's deliberations on the NPT, when the Senate rejected a reservation to the Treaty, urged by Dr. Edward Teller and other critics of the NPT, which would have interpreted it not to "preclude the deployment of purely defensive arrangements, if and when these became available."

Actual Star Wars weapons, of course, are years away, if indeed they can ever be developed. What is primarily at issue today is collaboration on research and development. However, once again, the NPT lays down firm prohibitions against assistance of any sort by a weapon state to a non-weapon state which is related to nuclear explosive devices, no matter how far short of actual production, assembly and deployment of a weapon such assistance may be. The Treaty's prohibitions in this regard are parallel to those found in existing United States law. At the same time, activities in non-weapon states party to the NPT whose purpose is the acquisition of a nuclear explosive device, no matter how experimental such activities may be, are likewise impermissible. Such a reading of the NPT is necessary to fulfill its purposes. Otherwise it would be possible, consistent with the Treaty, to take every step along the path of building an actual weapon, short of final production and assembly, and still be in technical Treaty compliance -- a result which would fundamentally undercut the entire NPT regime.

DISCUSSION

The NPT and Its Prohibitions

The two basic provisions of the NPT, Article I which lays down rules for the conduct of weapon states such as the United States 9/ and Article II which lays down rules for the conduct of non-weapon states such as non-nuclear NATO allies of the United States, both come into play in an assessment of the Star Wars initiative. 10/ Article I of the NPT states:

> Each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any way assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.

9/ Article IX, ¶3, of the NPT defines a "nuclear weapon state" as one which had "manufactured and exploded a nuclear weapon or other nuclear explosive device prior to January 1, 1967," *i.e.*, the United States, the Soviet Union, Great Britain, France and the People's Republic of China.

10/ These provisions are sometimes referred to as "reciprocal" in nature, and one commentator has gone as far as to say that Article II is "almost the mirror reflection of Article I." Bunn, "Horizontal Proliferation of Nuclear Weapons", in Boskey and Willrich, eds., *Nuclear Proliferation: Prospects for Control* 31 (1970). While something of an overstatement, this recognition of reciprocity is helpful analytically. *See* page 29, *infra*.

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Article II of the NPT states:

> Each non-nuclear weapon State party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.

For analytical purposes, Articles I and II are best dealt with in two parts. First, one must examine what things constitute "nuclear weapons" or "other nuclear explosive devices" to which the Articles' prohibitions apply. Second, one must turn to the nature of the activities prohibited with respect to such weapons and devices: (a) restrictions on transferring and receiving such weapons and devices; (b) restrictions on weapon states assisting, encouraging or inducing non-weapon states to obtain such weapons or devices; and (c) restrictions on non-weapon states manufacturing or otherwise obtaining such weapons or devices on their own or with the assistance of others. An analysis of both aspects of these Articles leads inevitably to the conclusion that, taken together, they establish sweeping constraints on collaborative research and development and any ultimate sharing of nuclear explosive-based defensive weapons.

I.

The Basic Treaty Prohibitions: Application to Nuclear Weapons and Explosive Devices of Any Sort

The language and history of Articles I and II of the NPT make it crystal clear that they ban absolutely the transfer by a weapon state to any country whatsoever 11/ and receipt by a non-weapon state 12/ of *any* nuclear explosive device, whether offensive, defensive, or even "peaceful". 13/

11/ The prohibition on transfers to "any recipient whatsoever" plainly extends to other weapon states, such as Great Britain. *See* *Hearings on the Treaty on the Non-Proliferation of Nuclear Weapons before the Senate Foreign Relations Committee*, 90th Cong., 2d Sess. 89 (1968) (hereinafter "*1968 Hearings*")

> (Senator Cooper. Am I correct that this Article I would prohibit the transfer of nuclear weapons or their control to any country, including England with whom we are said to have a special relationship?
>
> Mr. Nitze. That is correct.)

See also *Hearings on the Treaty on the Non-Proliferation of Nuclear Weapons before the Senate Foreign Relations Committee*, 91st Cong., 1st Sess. 355-357 (1969) (hereinafter "*1969 Hearings*"). Consequently, the United States would have to treat Great Britain, for example, no differently than the Federal Republic of Germany in terms of ultimate sharing of nuclear explosive-based defensive weapons.

12/ Since Article II only applies to non-weapon states, weapon states such as Great Britain could receive nuclear weapons or explosive devices from another country without violating their Treaty obligations. This absence of reciprocity, however, has no particular relevance in the context of proposals to share Star Wars technology, since the transfer prohibition on the United States in Article I is absolute.

13/ For a violation of Article I to occur, of course, there must be a transfer of a nuclear weapon or explosive device or "control" over a weapon or device. Likewise, Article II speaks to receipt of "control" over nuclear weapons and explosive devices. While the concept of "control" might seem

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As Mason Willrich, one of the leading commentators on the NPT has stated, the Treaty "does not distinguish between offensive nuclear warheads and nuclear warheads associated with ABM defense systems. The prohibitions on transfer and acquisition under Articles I and II apply equally to both." 14/

a) The Language of the NPT

One necessarily begins the task of treaty interpretation with the language of the Treaty itself. 15/

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13 cont./ Footnote continued from previous page.
to carry certain ambiguities, this concept was tightly defined during the course of the Treaty negotiations, largely because of Soviet concerns about potential weapons transfers to NATO forces. *E.g.*, Statements of Soviet Representative (Roschin) to the Eighteen Nation Disarmament Committee ("ENDC"), April 5, 1966, ENDC/PV 255, June 30, 1966, ENDC/PV 269, reprinted in ACDA, *Documents on Disarmament, 1966*, at 199-207, 394-402. *See generally* Shaker, *The Nuclear Non-Proliferation Treaty*, Ch. 4, 129-189 (1980). As a practical matter, it means that, under the Treaty, U.S. allies can have no more dominion over nuclear weapons then they can have within the existing NATO command structure: ultimate "custody and control" must remain with the United States. Indeed, in this respect, the Treaty simply codified internationally restrictions of U.S. domestic law, namely Section 92 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. §2122. *See generally 1968 Senate Report*, in ACDA, *Documents on Disarmament, 1968*, at 642, 645; *1969 Senate Report*, in ACDA, *Documents on Disarmament, 1969*, at 78, 81; 115 *Cong*. *Rec*. 6206-6207 (March 12, 1969) (Statement of Senator Sparkman).

14/ Willrich, *Non-Proliferation Treaty: Framework for Nuclear Arms Control* 69 (1969). *See also* Shaker, *The Nuclear Non-Proliferation Treaty* 203 (1980) (The NPT "applies not only to offensive nuclear weapons but also to defensive ones such as... nuclear warheads associated with anti-ballistic missiles' defence systems (ABMs)").

15/ ALI, *Restatement (Second) of the Foreign Relations Law of the United States* §147 at 451 (1965).

The language of Articles I and II is absolute. 16/ The Articles not only apply to nuclear "weapons" 17/, but to any "other nuclear explosive devices" as well. The Articles make no distinctions between weapons or devices based upon the purposes for which they may be used: even if it could be demonstrated beyond doubt that devices could only be used for "defensive" or "peaceful purposes", the prohibitions would still apply. Likewise, the language of the NPT provides no justification for making any distinction based upon the size of a nuclear explosive device: even a laboratory scale device would be covered. 18/ In short, Articles I and II on their face apply to the transfer and receipt of nuclear explosive devices of any sort for any purpose.

16/ As one commentator has stated, "The prohibitive sense of the words 'any', 'whatsoever' and 'otherwise' allows no exception." Shaker, The Nuclear Non-Proliferation Treaty 235 (1980).

17/ While the term "weapon" is not defined in the NPT, it is apparent that it means more than just a final, production weapon. The parties were well aware, for example, of the definition of "atomic weapon" in the Atomic Energy Act of 1954, as amended, which includes "any device utilizing atomic energy..., the principal purpose of which is for use as, or for development of, a weapon, a weapon prototype, or a weapon test device." Sec. 11d., 42 U.S.C. §2014d.

18/ Application to small size devices is relevant because the Excalibur system may produce explosions so small that they either could have no offensive purpose or an offensive purpose that is highly limited, i.e., to disabling the enemy's Star Wars satellites and space-based battle stations.

b) The History of the NPT

The history of the NPT fully confirms the application of its prohibitions to nuclear weapons and explosive devices of any sort.

The explicit goal of the NPT negotiating parties, as set down by the United Nations General Assembly, was to develop an agreement "void of loop-holes which might permit nuclear or non-nuclear Powers to proliferate, directly or indirectly, nuclear weapons in any form." 19/ The emphasis in General Assembly Resolution 2028 on restricting the spread of weapons "in any form" reflected an understanding that any Treaty distinctions based on purpose or intended use would be ultimately counterproductive. At least one commentator on the NPT has noted that, among the negotiators, there was a "unanimous conviction that nuclear explosive devices were indistinguishable from nuclear weapons." 20/ Likewise, "For the majority, the Treaty in compliance with principle (a) [of the General Assembly Resolution] had to cover both nuclear weapons and other nuclear explosive devices so as to avoid a serious loophole." 21/

This understanding dictated the scope of the NPT. Thus, while early proposals established simply a prohibition

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19/ G.A.Res.2028 (XX), (Nov. 19, 1965), reprinted in ACDA, Documents on Disarmament, 1965, at 532-534.

20/ Shaker, The Nuclear Non-Proliferation Treaty 205 (1980).

21/ Id. at 213.

on the transfer or receipt of "nuclear weapons" 22/, it was soon realized that this was not enough. As Deputy ACDA Director Fisher emphasized to the ENDC on August 9, 1966, the "inescapable fact" is that a nuclear explosive device intended for any use can be "easily adapted" for offensive weapons purposes. 23/ Consequently, when the United States and the Soviet Union eventually reached agreement on a joint draft on August 24, 1967, that draft extended the prohibitions of the Treaty to *all* nuclear explosive devices. 24/ The prohibitions of the joint draft remained thenceforth in all iterations of the Treaty, with the parties fully understanding their unequivocal meaning.

The nature of the NPT negotiators' decisions where highlighted during the consideration of the Treaty by the

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22/ *See, e.g.*, *U.S. Draft Treaty Proposals Submitted to the ENDC*, August 17, 1965, ENDC/152, reprinted in ACDA, *Documents on Disarmament, 1965*, at 347-349; *U.S. Proposals Submitted to the ENDC: Amendments to the U.S. Draft Treaty to Prevent the Spread of Nuclear Weapons*, March 21, 1966, ENDC/152 Add. 1, reprinted in ACDA, *Documents on Disarmament, 1966*, at 159-160.

23/ *See* Statement of ACDA Deputy Director Fisher, Aug. 9, 1966, ENDC/PV 280, reprinted in ACDA, *Documents on Disarmament, 1966*, at 525-528.

24/ *See U.S. and Soviet Draft Treaty Submitted to ENDC*, August 24, 1967, ENDC/192 and ENDC/193, reprinted in ACDA, *Documents on Disarmament, 1967*, at 338. Arguably, of course, because a defensive weapon is still a weapon, the Treaty's extension to other explosive devices was not even necessary to ensure application to nuclear explosive-based ballistic missile defenses.

United States Senate in 1968 and 1969. 25/ Before the Senate Foreign Relations Committee, the Administration made three points underscoring the application of Articles I and II to defensive weapons:

One, the Treaty was written to apply to explosive devices of any kind, regardless of their purposes, because distinctions based upon intended use are unworkable and would become a loophole to permit proliferation. 26/

Two, where the Treaty refers to negotiations to end the "nuclear arms race" and for "nuclear disarmament", as in Article VI 27/, those references include an obligation to negotiate "on both offensive and defensive missiles". 28/

Three, the Treaty was writing into international law existing United States statutory restrictions, such as those found in Chapters 9 and 12 of the Atomic Energy Act of 1954,

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25/ In its discussion of the history of the NPT, this memorandum relies to a large extent upon the record of consideration of the Treaty by the United States Senate in 1968 and 1969. While in some sense this is *post facto* legislative history, coming after completion of the negotiations, nonetheless the comments made on the Treaty during Senate deliberations generally reflect interpretations reached by the negotiating parties and are most helpful in illuminating the intent of the Treaty.

26/ *Report by Secretary of State Rusk to President Johnson on the Non-Proliferation Treaty*, July 2, 1968, reprinted in *1968 Hearings* at 249, 253. *See also 1968 Hearings* at 9 (Statement of Secretary of State Rusk).

27/ Article VI states, "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament...."

28/ *1968 Hearings* at 36 (Statement of ACDA Director Foster); *1969 Hearings* at 350 (Statement of Secretary of State Rogers).

as amended, which prohibit nuclear weapons transfers of any sort. 29/

The Treaty's particular application to defensive weapons in fact was a major focus of the 1968 Senate hearings. Critics of the NPT, such as Dr. Robert Strausz-Hupe, Director of the Foreign Policy Research Institute of the University of Pennsylvania, Representative Craig Hosmer and Dr. Edward Teller, attacked the Treaty precisely because of its failure to allow the United States to share defensive nuclear weapons with its allies -- or its allies independently to develop such weapons -- arguing that the Treaty's prohibitions would "hamstring" European self-defense, particularly as regarded the ability of non-nuclear members of NATO "to develop their own anti-ballistic missile systems" 30/; that "the Treaty bars a kind of proliferation which might be advantageous and encourages a kind which is not" 31/; and that "the implied condemnation of offensive and defensive weapons, is not sensible, is not just, and is not in the spirit of the United

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29/ *See* *1968 Hearings* at 21-22 (Statement of Secretary of State Rusk); *1969 Hearings* at 361 (Statement of Secretary of State Rogers). Chapter 9, 42 U.S.C. §§2121-2122, bans all atomic weapons exports, and Chapter 12, 42 U.S.C. §§2161-2165, bans the export of all atomic weapons information and technology, with limited exceptions related to cooperation with Great Britain on weapons matters. For further discussion, *see* page 26, *infra*.

30/ *1968 Hearings* at 133-134 (Statement of Dr. Strausz-Hupe).

31/ *1968 Hearings* at 163 (Statement of Representative Hosmer).

States," essentially eliminating the possibility of a non-nuclear weapon state developing its own nuclear defensive weapon. 32/

For their part, proponents of the NPT, accepting the premise that the NPT imposes a blanket ban on the transfer of purely defensive nuclear weapons by nuclear weapon states and the acquisition of such weapons by non-weapon states, argued that such a premise was essential to the Treaty's effectiveness. Thus, Congressman Chet Holifield reflected at length on the difficulties of "drawing a line" between defensive and offensive weapons, stating that "any step toward peace which can be obtained by the deployment of offensive or defensive weapons can be exercised more safely by having them remain in the control and custody of the United States..." 33/; while Mason Willrich, Professor of Law and Director of the Center for the Study of Science, Technology and Public Policy at the University of Virginia, flatly stated, "I do not feel that the option of transferring defensive systems is a good option to preserve." 34/ Arthur Larson, Chairman of the Educational Committee to Halt Atomic Weapons Spread, and the final witness in the 1968 hearings,

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32/ 1968 Hearings at 189 (Statement of Dr. Teller). See also id. at 191, 195 (Statement of Dr. Teller). Dr. Teller in fact urged the Senate to adopt a reservation to the Treaty, interpreting it not to "preclude the deployment of purely defensive arrangements, if and when these become available." 1968 Hearings at 189.

33/ 1968 Hearings at 149, 161.

34/ 1968 Hearings at 220. See also id. at 211.

perhaps best summed up the response to opponents of the NPT who wanted to retain flexibility to transfer defensive weapons by stating that, if the day should ever come when defensive weapons are feasible, then there will be "time enough to introduce new kinds of treaties and security arrangements," but in the interim it was essential to bring proliferation of all kinds under control. 35/

The Senate Foreign Relations Committee, which produced two reports on the Treaty 36/, supported the broad application of the NPT to both offensive and defensive weapons. Thus, both reports cite with approval Secretary of State Rusk's characterization of the Treaty as covering nuclear devices of any sort, whatever their intended purposes 37/, as well as the identity of Treaty obligations with existing U.S. law. 38/ And, after specifically acknowledging the objections of Treaty opponents such as Dr. Strausz-Hupe, Representative Hosmer and Dr. Teller 39/, the

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35/ 1968 Hearings at 240.

36/ There are two Senate Reports on the NPT because, while the Senate Foreign Relations Committee approved the Treaty in 1968, the 90th Congress did not act upon it before its term expired. Thus, when the 91st Congress convened in 1969, it was necessary for the Committee to consider the NPT once again.

37/ 1968 Senate Report, in ACDA, Documents on Disarmament, 1968, at 642, 644; 1969 Senate Report, in ACDA, Documents on Disarmament, 1969, at 78, 80.

38/ Id. at 645, 81.

39/ See 1968 Senate Report, in ACDA, Documents on Disarmament, 1968, at 642, 650-651; 1969 Senate Report, in ACDA, Documents on Disarmament, 1969, at 78, 89-90.

Senate Foreign Relations Committee rejected any reservation to the Treaty, with regard to defensive systems or otherwise. It stated:

> [T]his Treaty does represent a potential cost to the United States in its alliance relationships. Heretofore it was a national decision whether the United States would use its nuclear assets in helping one or more countries to develop nuclear weapons. Admittedly, this was an option the United States never used except in the case of Great Britain; but it was an option subject only to a decision of the Executive Branch and the Congress. Now we have all but given up that option in the sense that this Treaty poses a formidable barrier to the United States assisting other countries in the development of nuclear-weapons programs. Nevertheless, the Committee believes the possible future costs of renouncing this option are overshadowed by the major step the treaty takes in the direction of controlling the spread of nuclear weapons. 40/

Finally, the full Senate debate on the Treaty in March, 1969, underscored the United States' commitment to the Treaty's rejection of distinctions among intended uses of nuclear devices and of the prospects for selective proliferation. 41/ Speaker after speaker criticized the contention that the United States should reserve the option of transferring to friendly nations "purely defensive" nuclear weapons. Thus, Senator Sparkman, for example, noted

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40/ 1968 Senate Report, in ACDA, Documents on Disarmament, 1968, at 642, 654; 1969 Senate Report, in ACDA, Documents on Disarmament, 1969, at 78, 93.

41/ Indeed, before the Senate took up the Treaty, the State Department commented specifically on the proposed reservation which would have allowed transfers of defensive weapons, calling any reservation to weapons provided for defense "illusory". 115 Cong. Rec. 4437 (Feb. 25, 1969). The State Department noted the transfer of any weapons, for whatever purpose, would be "in direct contravention of" and would "wreck" the Treaty. Id.

that the ban on the transfer of defensive weapons is consistent with U.S. law 42/, and Senator Percy argued that "defensive proliferation is potentially offensive proliferation." 43/ Such views carried the day and the Treaty was ratified on March 13, 1969, without reservation, by a vote of 83-13. 44/ Its application to nuclear explosive-based defensive weapons could not be clearer.

II.

Prohibited Activities Under the NPT: Application to Collaborative Research and Development

That the NPT bars the actual transfer by a weapon state and receipt by a non-weapon state of a finally-assembled nuclear-explosive based defensive weapon, ready for use in a nation's arsenal, is beyond debate. That this bar extends beyond transfer and receipt of final production weapons to experimental, test or prototype devices is likewise beyond debate. 45/ Today, however, there is not yet a "weapon" as such to be transferred. 46/ Such weapons

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42/ 115 Cong. Rec. 6206, 6207 (March 12, 1969).

43/ 115 Cong. Rec. 6362 (March 13, 1969). See also, e.g., Statement of Senator Fong, 115 Cong. Rec. 6368 (March 13, 1969).

44/ 115 Cong. Rec. 6380 (March 13, 1969).

45/ See page 11, note 17, supra.

46/ Whether one would ever be able to speak of the "transfer" of "control" of a completed total ballistic missile defense system, in the sense of one country giving another country the power to decide upon its use, is problematic. The system, once deployed and targeted for particular defensive purposes, would essentially have to operate on a completely automated basis to be effective.

may be years in the future, if they can ever be developed at all. Rather, what is at issue today is primarily collaboration on research and development. The NPT on its face does not speak to "research and development". Obviously, there is a spectrum of activity relating to nuclear weapons, ranging from basic or theoretical physics at one end to the final production, assembly and deployment of operational weapons at the other. Further analysis, particularly of the second halves of Articles I and II, is therefore necessary to determine the precise nature and scope of the activities prohibited by the NPT. That analysis reveals that the Treaty's restrictions not only were intended to cover transfer and acquisition of a weapon itself, but that they were written to ensure that the basic prohibitions would not be circumvented by technology transfer and technical or other kinds of assistance that might fall under the rubric of "collaborative research and development", or, for that matter, independent activities in non-weapon states short of final production and assembly of a weapon.

a) The Language of the NPT

The language of the Treaty is broad. In Article I, nuclear weapon states, after undertaking their basic non-transfer pledge, undertake "not in any way to assist, encourage or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or nuclear explosive devices, or control over such weapons or explosive devices." In Article II, non-nuclear weapon states party to the Treaty, after undertaking their basic non-receipt pledge, undertake "not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices"; and "not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices." The reach of these prohibitions, particularly those in Article I, is potentially to any activity designated as "nuclear" since, as Mason Willrich has pointed out, "[a]lmost any kind of international nuclear assistance is potentially useful to a nuclear weapons program." 47/ Indeed, mere blandishments by a nuclear weapon state to a non-nuclear nation to "go nuclear" might hypothetically trigger the Treaty's prohibitions. 48/ Such an interpretation certainly goes too far. Rather, the Treaty itself provides two useful guideposts as to what is permitted and what is not.

First, if the assistance -- technology transfer, communication of design information, etc. -- or the activities conducted in the non-nuclear weapon state are directly and explicitly related to nuclear weapons or nuclear explosive devices, then they are prohibited. Under such a reading of the Treaty, any such assistance or activities, no

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47/ Willrich, The Treaty on Non-Proliferation of Nuclear Weapons: Nuclear Technology Confronts World Politics, 77 Yale L.J. 1447, 1467 (1968).

48/ Id.

matter how many steps short of actual final production and assembly of a weapon or device, could not be undertaken. Otherwise, it would be possible, consistent with the Treaty, for nuclear assistance and/or nuclear activities in a non-nuclear weapon state to allow such a state to take every step along the path of building an actual weapon, short of final production and assembly and still be in compliance with the NPT -- a result which would fundamentally undercut the very purpose of the Treaty. Of course, since Star Wars R&D is by its terms directly weapons-related, it falls within the Treaty's restrictions.

Second, the Treaty itself provides a mechanism, if there is any doubt, to determine whether the assistance or activity is permissible or not. In the words of Mason Willrich, "[T]he application of safeguards to all peaceful nuclear assistance to non-nuclear weapon states, as required by Article III, provides a way to establish and clarify the peaceful purpose of most international nuclear assistance." 49/ In short, where applications are peaceful, safeguards are applied, and the prohibitions of Articles I and II would not ordinarily come into play. However, where the assistance or activity is of a military nature and no safeguards are applied, then the prohibitions are triggered,

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49/ Willrich, *The Treaty on Non-Proliferation of Nuclear Weapons: Nuclear Technology Confronts World Politics*, 77 Yale L.J. 1447, 1467 (1968). *See also* Shaker, *The Nuclear Non-Proliferation Treaty* 256-257 (1980).

regardless of the nature of the specific assistance or activity or its proximity to final weapons "manufacture". Since Star Wars R&D will be of a military nature and therefore unsafeguarded, it would fall under the Treaty's prohibitions. 50/

b) *The History of the NPT*

The history of the NPT supports the interpretation just outlined.

50/ The one exception which the Treaty makes to this principle relates to assistance by one weapon state to another weapon state. Article I only prohibits assistance to "any non-nuclear weapon State". The Treaty distinction in this regard was meant to recognize internationally the special relationship which the United States enjoyed with Great Britain in nuclear matters. *See* Shaker, *The Nuclear Non-Proliferation Treaty* 260 (1980). As Adrian Fisher, Deputy Director of ACDA, stated in the 1969 hearings,

> That [distinction between the first and second parts of Article I] was to make possible a continued cooperative arrangement with the nuclear weapon state with whom we have had a close cooperative arrangement since 1942; that is, the United Kingdom. If we had the same language in the second clause that we had in the first it would force a breach of that relationship and that was felt not a wise thing to do.

1969 Hearings at 356. U.S. law likewise recognizes that equipment, materials and information transfer regarding atomic weapons is permissible with any "nation [which] has made substantial progress in the development of atomic weapons," *see* Secs. 91c., 145c. of the Atomic Energy Act of 1954, as amended, 42 U.S.C. §§2121c., 2165c., an exception which, as a matter of domestic law, has been interpreted to apply only to U.S. allies which had acquired nuclear weapons in 1958, *i.e.*, Great Britain. *See Hearings on Amending the Atomic Energy Act of 1954 before the Subcommittee on Agreements for Cooperation of the Joint Committee on Atomic Energy*, 85th Cong., 2d Sess. 464 (1958) (Statement of Secretary of State Dulles). *See generally* Willrich, *Non-Proliferation Treaty: Framework for Arms Control* 73 (1969).

From the outset, it was understood that assistance and activities subject to the Treaty's restrictions would have to be broadly defined if the Treaty were to be effective. Thus, the so-called "Irish Resolution" of the United Nations General Assembly, which launched the negotiations in December, 1961, called upon all nations to reach an agreement under which weapon states would refrain, inter alia, "from transmitting the information necessary for [nuclear weapons] manufacture to States not possessing such weapons...." 51/ The United States, moreover, consistently took the position that its proposals would not just bar the transfer of weapons but would "not place... information on [nuclear weapons] manufacture in the hands of any non-nuclear country." 52/ And, throughout the negotiations, U.S. negotiators emphasized the U.S. policy "to protect design data from dissemination to non-nuclear-weapon countries." 53/ The complete coverage of data and information, as well as weapons and devices, is consistent with and indeed necessitated by principle (a) of General Assembly Resolution 2028(XX), namely, that the NPT should be "void of loop-holes". 54/

51/ G.A.Res.1665 (XVI), Dec. 4, 1961 (emphasis added).

52/ GAOR, 20th Sess., 1st Committee, 1373d mtg., Nov. 8, 1965, ¶45 (emphasis added).

53/ Statement of ACDA Director Foster to the ENDC, Feb. 16, 1966, ENDC/PV 241, reprinted in ACDA, Documents on Disarmament, 1966, at 39.

54/ Despite the straightforwardness of this reading of the Treaty's broad-gauged restrictions on assistance under Article I, there is some history, more relevant perhaps to

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Two elements of the Senate's deliberations on the NPT confirm that the Treaty's restrictions on assistance by weapon states and weapons-related activities of non-weapon states are so broad as to cover collaborative R&D of the sort that might be proposed under the Star Wars initiative. The first of these relates to the linkage between the Treaty and

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54 cont./ Footnote continued from previous page. Article II's restrictons regarding the "manufacture" of nuclear weapons, which might be read to allow research and other activities related to weapons short of final assembly, production and deployment. The United States draft treaty of August 17, 1965 simply prohibited "manufacture" of nuclear weapons. ENDC/152, August 17, 1965, reprinted in ACDA, Documents on Disarmament, 1965, at 347. The Soviet Union draft treaty of September 24, 1965, restricted "preparations for the manufacture" of nuclear weapons, arguably a broader formulation. Soviet Draft Treaty, A/5976, Sept. 24, 1965, reprinted in ACDA, Documents on Disarmament, 1965, at 443, 444. In commenting on both these drafts, the Swedish delegate (Myrdal) to the ENDC noted, on February 24, 1966, that the delegates were "facing... a long ladder with many rungs, and the practical question is: on which of these is it reasonable and feasible to introduce the international blocking.... To prohibit just the final act of 'manufacture' would seem to come too late in these long chains of decisions." ACDA, Documents on Disarmanent, 1966, at 56. Yet the negotiators did not respond to Sweden's call for defining a "middle link... on which the prohibitory regulation should most definitely be focused". Id. Indeed, the final Treaty adopts the U.S. formulation of "manufacture" only, rather than the apparently broader restriction proposed by the Soviet Union. Therefore, there arguably remains some question as to the precise stage of development where Article II, in particular, takes effect. This apparent latitude led Professor Willrich to state, "[I]t would appear that at least under Article II of the Treaty non-nuclear weapon states would remain free to engage in many of those activities on the 'long ladder' which stop short of actual manufacture, including perhaps a major portion of nuclear weapons research and development work." Willrich, The Treaty on Non-Proliferation of Nuclear Weapons: Nuclear Technology Confronts World Politics, 77 Yale L.J. 1447, 1466-1467 n.69 (1968). The better view, however, would seem to be that, consistent with the Treaty's objective of avoiding loop-holes, the absence of a specifically designated "rung" or "link" must mean that the Treaty prohibitions take effect at the lowest rungs of the ladder.

the Atomic Energy Act. The second relates specifically to the meaning of the term "manufacture" in the context of the Treaty.

First, the acknowledged relationship between Chapters 9 and 12 of the Atomic Energy Act and the transferor prohibitions in Article I of the NPT is most helpful in determining the limitations under the NPT applicable to assistance by nuclear weapon states. As noted above 55/, Sections 91 and 92, of that Act, 42 U.S.C. §§2121, 2122, establish basic restraints under U.S. law on the transfer of atomic weapons equipment and material, while Sections 141 and 144 of the Act, 42 U.S.C. §§2161, 2164, establish essentially identical restrictions on the transfer of data and information related to research, development or design of atomic weapons and related facilities, commonly known as "Restricted Data". 56/ These provisions not only prohibit any weapons transfers but they effectively foreclose the possibility of collaborative weapons research either utilizing U.S. equipment and material or U.S. data and information with any country other than Great Britain, a weapon state. 57/ Given the equivalence of domestic law and the Treaty 58/, it is reasonable to interpret the Treaty

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55/ *See* pages 14-15, *supra*.

56/ "Restricted data" is defined in Section 11y. of the Act to include, *inter alia*, "all data concerning (1) design, manufacture or utilization of atomic weapons." 42 U.S.C. §2014y.

57/ *See* page 23, note 50, *supra*.

58/ *See* pages 14-15, *supra*.

itself in the same fashion as U.S. domestic law, i.e., as barring collaborative R&D with non-nuclear weapon states on nuclear explosive-based defensive weapons technology of the sort contemplated by the SDI. 59/

Second, testimony in the 1968 Senate hearings is most helpful in defining the term "manufacture" and so determining what non-weapon states may do themselves under Article II without violating the Treaty. During the hearings, Senator Case asked Secretary of State Rusk, "Where do you draw the line between a nuclear explosive device and something in which a non-nuclear nation may work in research and development under another provision of the treaty?" 60/ Both Secretary of State Rusk and ACDA Director Foster indicated in response that work on anything which would lead to "an uncontrolled nuclear reaction available to non-nuclear weapon states" would be prohibited. 61/ Mr. Foster then submitted for the record the following detailed response:

> The treaty articles in question are Article II, in which non-nuclear-weapon parties undertake "not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices," and Article IV, which provides that nothing in the Treaty is to be interpreted as affecting the right of all Parties to the Treaty "to develop research, production and use of nuclear energy for peaceful purposes... in conformity with Articles I and II of this Treaty." In the course

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59/ Some collaboration with weapon states, i.e., Great Britain, would, of course, be possible.

60/ 1968 Hearings at 38.

61/ 1968 Hearings at 39.

of the negotiation of the Treaty, United States representatives were asked their views on what would constitute the "manufacture" of a nuclear weapon or other nuclear explosive device under Article II of the draft treaty. Our reply was as follows:

> While the general intent of this provision seems clear, and its application to cases such as those discussed below should repesent little difficulty, the United States believes it is not possible at this time to formulate a comprehensive definition or interpretation. There are many hypothetical situations which might be imagined and it is doubtful that any general definition or interpretation, unrelated to specific fact situations could satisfactorily deal with all such situation.
>
> Some general observations can be made with respect to the question of whether or not a specific activity constitutes prohibited manufacture under the proposed treaty. For example, facts indicated that the purpose of a particular activity was the acquisition of a nuclear explosive device would tend to show non-compliance. (Thus, the construction of an experimental or prototype nuclear explosive device would be covered by the term "manufacture" as would be the production of components which could only have relevance to a nuclear explosive device.) Again, while the placing of a particular activity under safeguards would not, in and of itself, settle the question of whether that activity was in compliance with the treaty, it would of course be helpful in allaying any suspicion of non-compliance.
>
> It may be useful to point out, for illustrative purposes, several activities which the United States would not consider per se to be violations of the prohibitions in Article II. Neither uranium enrichment nor the stockpiling of fissionable material in connection with a peaceful program would violate Article II so long as these activities were safeguarded under Article III. Also clearly permitted would be the development, under safeguards, of plutonium fuel power reactors, including research on the properties of metallic plutonium, nor would Article I interfere with the development or use of fast breeder reactors under safeguards. 62/

62/ 1968 Hearings at 39.

In short, for purposes of interpreting the term "manufacture", there is a line to be drawn between activities related to weapons or explosive devices and activities related to controlled fission, based particularly on the "purpose" of an activity. 63/ Any activity, however experimental and no matter where along the proliferation ladder it falls, may be in non-compliance if its purpose is the "acquisition of a nuclear explosive device." 64/ Since Star Wars research would be for no other purpose, it would fall within the Treaty's category of forbidden "manufacture."

In sum, the assistance/manufacture restrictions of Article I and II of the NPT are best understood as establishing a simple rule: assistance by a weapon state and activities by a non-weapon state which are directly related to the development of an atomic weapon or other nuclear explosive device, no matter how distant in the future the actual production, assembly and deployment of such a weapon or device may be, are flatly prohibited. Consequently, than Great Britain) on research and development related to

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63/ Looking to the "purpose" of an activity is consistent with U.S. law. See, e.g., the definition of "atomic weapon" in Section 11d. of the Atomic Energy Act, 42 U.S.C. §2014d.

64/ This reading of "manufacture" to bar any weapons-related activities is, it should be noted, consistent with reading, to the extent possible, Articles I and II in a "reciprocal" fashion, with the prohibitions of both being equally broad. See page 7, note 10, supra.

nuclear explosive-based defensive weapons is lawful neither for the United States nor for its allies under the NPT. 65/

65/ Even if a collaborative R&D program would violate the Treaty, the question remains how the Treaty's provisions could be enforced. The NPT contains no enforcement provisions or provisions for sanctions should any violation occur. See 1968 Hearings at 29 (Statement of Secretary of State Rusk); 1969 Hearings at 367 (Statement of Secretary of State Rogers). Moreover, the Treaty is not self-executing. 1968 Hearings at 21 (Statement of Secretary of State Rusk). Consequently, whether a foreign country which determined to collaborate with the United States on nuclear explosive-based defensive weapon research could be barred from doing so would depend upon its own domestic legislation implementing the NPT. The United States, however, does have legislation which (a) would prohibit it from violating Article I, and (b) would, absent Presidential waiver, require it to impose sanctions against countries violating Article II. Chapters 9 and 12 of the Atomic Energy Act, prohibiting U.S. transfers of atomic weapons equipment, materials, data and information, would seem to be enforceable against the United States in domestic courts. At the same time, Section 129(1)(D) of the Atomic Energy Act, 42 U.S.C. §2158(1)(D), bans the export of nuclear materials and equipment to any non-nuclear weapon state which has "engaged in activities involving source or special nuclear material and having direct significance for the manufacture or acquisition of nuclear explosive devices...." Under this provision, while the sanction could be waived by the President if he determined that "cessation of [nuclear] exports would be seriously prejudicial to the achievement of United States non-proliferation objectives or otherwise jeopardize the common defense and security," non-nuclear weapon state R&D concerning nuclear explosive-based defensive weapons would immediately put that country's peaceful nuclear exports from the United States at risk.

APPENDIX 5

U.S. INFORMATION PERTAINING TO THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS (JULY 29, 1985)

Since its entry into force in March 1970, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) has been a central component of international efforts to prevent the spread of nuclear weapons while encouraging the broadest application of nuclear energy for peaceful purposes. With more than 125 parties, it has the largest number of adherents of any arms control agreement in history.

The NPT has three major goals. The first, which was the driving force behind the initial push for the NPT, is to prevent the further spread of nuclear weapons. The second is to foster peaceful nuclear cooperation under international safeguards. The third goal, added during the ensuing multilateral deliberations, is to encourage negotiations to end the nuclear arms race with a view to general and complete disarmament. The individual substantive articles of the Treaty have been carefully drawn to serve these three important goals.

Preventing the Further Spread of Nuclear Weapons

Articles I and II of the Treaty specifically seek to prevent the further spread of nuclear weapons, thereby strengthening the security and well-being of all states. Under Article I, the nuclear weapon states party to the Treaty pledge not to transfer nuclear explosives to any other state, and not to assist, in any way, non-nuclear weapon states to manufacture or acquire such devices. Under Article II, more than 120 non-nuclear weapon states party to the Treaty have pledged not to manufacture or otherwise acquire nuclear explosives, or to seek or receive assistance in the manufacture of nuclear explosives.

Article III obligates the non-nuclear weapon state parties to accept safeguards, administered by the International Atomic Energy Agency (IAEA), on their peaceful nuclear activities. Such safeguards provide assurance that nuclear materials in non-nuclear weapon states are not diverted from peaceful purposes to the manufacture of nuclear explosives, and their acceptance demonstrates a country's peaceful intentions. This overall fabric of non-proliferation assurances and safeguards in turn is an essential basis for peaceful nuclear cooperation among NPT parties provided for under Article IV.

Article I

The United States has not transferred nuclear weapons, nor assisted, encouraged, or induced any non-nuclear weapon state to manufacture or otherwise acquire a nuclear explosive device. US law, policy, procedures, and regulations are designed to ensure that the US does not directly or indirectly assist any non-nuclear weapon state to build or acquire a nuclear device.

Steps have been taken in the years since the Treaty's entry into force to tighten controls over US exports of a so-called dual-use nature that might be used for nuclear explosive purposes. These controls are to ensure that such exports are approved only for legitimate non-explosive uses in conformance with the US Article I obligation.

Further, in December 1982, the US ratified the Convention on the Physical Protection of Nuclear Material. The Convention (1) provides for certain levels of physical protection during international shipment of nuclear materials; (2) establishes a general framework for cooperation among states in the recovery and return of stolen nuclear material; and (3) defines certain serious offenses involving nuclear material for which state parties define punitive action.

The United States also has a longstanding policy of encouraging all countries to join the NPT. In recent years, it has actively promoted additional adherence to the Treaty. Continued, increased adherence represents a concrete demonstration of the strength and continuing vitality of the Treaty regime.

Article III

Under Article III, the IAEA has developed an extensive system of safeguards to ensure that nuclear materials in non-nuclear weapon state parties are used solely for non-explosive purposes. Since 1979, there has been a 40% increase in the number of major facilities under safeguards, and about 800 nuclear installations are now subject to IAEA safeguards in these parties.

This system has demonstrated its value and effectiveness through some 13 years of experience in support of the NPT. By providing a high degree of confidence that nuclear materials are used only for peaceful purposes, the IAEA safeguards system provides an indispensable basis of confidence for nuclear cooperation.

In the US view, safeguards implementation has been conducted in careful conformity with the requirements of Article III.3, including the important objective of ensuring that safeguards not hamper international cooperation, or economic or technological development. IAEA safeguards have not led to undue interference in facility operation or compromised information protected as commercially confidential. Moreover, the cost of implementing safeguards is a very small percentage of the overall operating costs of nuclear facilities. A high level of cooperation between the IAEA and the inspected state is key to achieving effective safeguards while protecting these interests of NPT parties.

All member states contribute to the IAEA safeguards budget which accounts for more than one-third of the total IAEA budget. Under a special safeguards financing formula, however, a small group of about 36 member states contributes over 98% of the safeguards budget; the nuclear weapon states bear a substantial share of these expenses.

As of December 31, 1984, the safeguards agreements required by Article III had been negotiated and had entered into force for 77 parties, including 11 agreements that entered into force since 1979. Agreements with seven additional parties are awaiting entry into force. While more than 40 NPT parties have yet to negotiate required safeguards agreements to meet fully their Treaty obligations, none of these countries has significant nuclear activities.

For its part, the United States concluded a voluntary safeguards agreement with the IAEA in 1980. Under this agreement, the IAEA has the right to apply safeguards to all nuclear material in all US nuclear facilities, excluding only those facilities associated with activities having direct national security significance. The list of eligible facilities provided to the IAEA includes more than 230 private and government-owned nuclear facilities. By submitting US facilities to IAEA safeguards, the United States sought to encourage wider adherence to the NPT by demonstrating that NPT adherence and acceptance of IAEA safeguards are not impediments to commercial nuclear transactions. At the same time, US acceptance of IAEA safeguards on its civil nuclear facilities provides an opportunity for IAEA inspectors and US officials to combine their experience and develop means for improving the efficiency and effectiveness of the safeguards system.

The United States has fully participated in the work of the NPT Exporters Committee, also called the Zangger Committee, to develop and apply a consistent interpretation of Article III.2 of the Treaty in which parties agree not to provide source or special fissionable material, or equipment or material "especially designed or prepared for the processing, use or production of special fissionable material", unless safeguards are applied to source or special fissionable material produced, processed, or used in such equipment. The list of equipment and materials developed by the Committee has made an important contribution to assuring uniform rules for international nuclear trade. Inconsistent or inappropriate non-proliferation export controls would disrupt efforts to promote the objectives of the NPT. The United States has consistently supported efforts to preserve and enhance the effectiveness of this system.

In an effort to provide further support for the comprehensive safeguards concept which is embodied in the NPT, in July 1981, President Reagan urged all major nuclear suppliers to require acceptance of such safeguards on all peaceful nuclear activities in non-nuclear weapon states as a condition of significant new nuclear supply commitments. The United States applies this condition to its own significant nuclear exports, and has continued to try to persuade other nuclear suppliers to do so. We believe that acceptance of comprehensive safeguards by all non-nuclear weapon states, preferably by adherence to the NPT, would greatly strengthen the non-proliferation regime and reinforce the security of all states.

The US has supported international efforts to strengthen the IAEA safeguards system, voluntarily contributing more than $41 million to the IAEA for the development and procurement of new safeguards equipment. This support also includes technical experts loaned to the Agency without charge to improve the effectiveness and efficiency of safeguards.

Article VII

Article VII of the NPT states that "Nothing in this Treaty affects the right of any group of States to conclude regional treaties in order to assure the total absence of nuclear weapons in their respective territories."

Pursuant to Article VII, and in accord with its overall non-proliferation policy, the US believes the creation of nuclear weapons free zones (NWFZs), under appropriate conditions, can contribute to regional and global security. The US supports the establishment of NWFZs where:

-- the initiative for the creation of the NWFZ comes from the states in the region concerned;

-- all states whose participation is deemed important participate in the zone;

-- the zone arrangement provides for adequate verification of compliance with the zone's provisions;

-- the establishment of the zone does not disturb existing security arrangements to the detriment of regional and international security;

-- the zone arrangement effectively prohibits its parties from developing any nuclear explosive device, for whatever purpose;

-- the zone arrangement does not seek to impose restrictions on the exercise of rights recognized under international law, particularly the principle of freedom of navigation on the high seas, in international air space, and in straits used for international navigation and the right of innocent passage through territorial seas; and

-- the establishment of a zone does not affect the existing rights of its parties under international law to grant or deny transit privileges, including port calls and overflight, to other states.

The Treaty of Tlatelolco, which establishes Latin America as a NWFZ, is the only existing NWFZ in a populated area. The US has signed and ratified Protocols I and II to this Treaty. By taking this step, the US has pledged not to store or deploy nuclear weapons in territories within the zone for which it is internationally responsible. It also has pledged not to use or threaten to use nuclear weapons against Latin American states for whom the Treaty is in effect, or to store, install, or deploy nuclear weapons in the territory of any such state.

The US takes very seriously and is in full compliance with its obligations under both Protocols. It has also encouraged all eligible states that have not yet done so to take the steps needed to bring the Treaty fully into force.

The US has consistently supported proposals to establish nuclear free zones in South Asia, Africa, and the Middle East, consistent with the criteria noted above.

Fostering The Peaceful Uses of Nuclear Energy

When the NPT was concluded, there was a fundamental understanding that non-nuclear weapon states that adhered to the Treaty would be able to pursue the benefits of the peaceful uses of the atom either alone or in cooperation with states already possessing nuclear technology. Article IV of the Treaty thus recognizes "the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of this Treaty". At the same time, it commits all parties to "facilitate...the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy". It further calls for the development of applications of peaceful nuclear energy, especially in non-nuclear weapon states and with "due consideration for the needs of the developing areas of the world".

Article IV

Since the "Atoms for Peace" program was launched by President Eisenhower in 1953, nuclear energy has made remarkable strides in contributing to an improved quality of life in many nations.

There are over 340 nuclear power reactors in operation around the world [approximately 200 GW(e)]. Nearly 200 additional nuclear power plants [approximately 200 GW(e)] are under construction or have been firmly committed. Much of this commitment to nuclear power is centered in the industrialized world; but NPT developing nations such as the Republic of Korea and Yugoslavia are producing electricity from nuclear power reactors, while others, such as Egypt, Indonesia, Mexico, the Philippines, and Romania are moving toward the use of nuclear power. In turn, dozens of developing country NPT parties now have research reactors or the beginnings of nuclear scientific establishments. Even more NPT countries have begun to make effective use of radioisotopes and radiation in medicine, industry, and agriculture.

The advent of the NPT has enhanced this contribution and furthered international cooperation in the civil nuclear field. In particular, the non-proliferation assurances and safeguards provisions of the Treaty provide an indispensable basis for confidence that such assistance will not be misused.

As one of the original proponents of the NPT, the United States has long recognized that adherence to the NPT should facilitate international nuclear cooperation. Parties to the Treaty should receive special consideration and special benefits in international civil nuclear cooperation in a manner consistent with the overall objectives and spirit of the Treaty. That approach is reflected in the record of specific US nuclear cooperation and assistance since the 1980 Review Conference, as well as in the broad policies guiding US nuclear relationships with other countries.

US Cooperation: An NPT Preference

US preferential treatment of NPT parties has been clearly demonstrated since the second NPT Review Conference in 1980. In particular,

- Since that Conference, all new or amended Agreements for Cooperation with non-nuclear weapon states entered into by the United States have been with parties to the NPT or the Treaty of Tlateloco.

  These include long-term Agreements for Cooperation with:

Australia
Bangladesh
Colombia
Egypt
Finland*

Indonesia
Morocco
Norway
Peru
Sweden

In addition, US nuclear cooperation with the following NPT parties has continued to be provided for under Agreements for Cooperation concluded before the 1980 Conference:

Austria
Belgium(a)
Canada
Denmark(a)
Germany, Federal
  Republic of(a)
Greece(a)
Ireland (a)
Italy(a)
Jamaica(b)
Japan
Republic of Korea

Luxembourg(a)
Malaysia(b)
Mexico(b)
Netherlands(a)
Philippines
Portugal
Romania(b)
Switzerland
Thailand
United Kingdom(a)
Yugoslavia(b)

(a) Under the US Agreement for Cooperation with Euratom.

(b) Under the US Agreement for Cooperation with IAEA.

- In 1980-84, all significant US exports of enriched uranium (totalling over 12 million kg) were to parties to the NPT, except for 928,000 kg to Spain, which has IAEA safeguards on its entire civil nuclear program; 381,000 kg to France; and a final shipment of 19,000 kg under a pre-NPT commitment to India. The exports to NPT parties in this period represented a 15% increase over the corresponding figure for the preceding 5 years; had an energy equivalent value of some 3.45 billion barrels of oil; and required the energy equivalent of some 38 million tons of US coal to enrich.

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*The US-Finland agreement for cooperation has not yet entered into force, but has been signed and transmitted to the Congress for review.

- In 1980-84, all nuclear export financing arrangements provided by the US Export-Import Bank (totalling well over $1 billion) were for the benefit of parties to the NPT, except for $61 million for Spain, which has IAEA safeguards on its entire civil nuclear program.

  These include such arrangements with:

  Greece
  Indonesia
  Republic of Korea
  Philippines
  Romania
  Yugoslavia

  The Export-Import Bank has indicated that it will be prepared to help finance proposed US nuclear exports to Egypt.

  Cumulative loans and guarantees extended by the Bank since 1970 to state parties to the NPT totals $7.5 billion.

- Since 1980, all US exports of research reactors have been to developing countries party to the NPT. These have included reactors (valued at $6.3 million) sold to

  Bangladesh
  Malaysia
  Morocco

In addition, the United States has previously furnished 59 research reactors to 28 other states party to the NPT.

- Since 1980, all "sister laboratory" and "joint committee" arrangements concluded by the United States in the nuclear field have been with parties to the NPT or the Treaty of Tlatelolco or both. These have included such arrangements with:

  Colombia
  Egypt
  Greece
  Republic of Korea
  Mexico
  Thailand

- Since the 1980 Review Conference, 98% (in value) of US exports of drugs containing radioactive isotopes for use in internal medicine have been exported to parties to the NPT, who have also received over $22 million worth of isotopes, heavy water and other nuclear-related materials from the United States.

- 96% of all Type II Fellowships granted by the United States under the IAEA in 1981-84 (totalling approximately $6.7 million) have been for NPT parties, including the following:

  Bangladesh
  Cyprus
  Ecuador
  Egypt
  El Salvador
  Ethiopia
  Ghana
  Greece
  Kenya
  Republic of Korea
  Malaysia
  Mexico
  Nigeria
  Paraguay
  Peru
  Philippines
  Portugal
  Sri Lanka
  Sudan
  Thailand
  Turkey
  Uruguay
  Yugoslavia

Since the inception of Type II fellowships, the US has allocated 932 of such fellowships to nationals of 59 states party to the NPT costing the US approximately $20 million. The vast majority have gone to developing countries.

- Since the 1980 Review Conference, all of the IAEA "Footnote A" technical assistance projects funded by extra-budgetary contributions by the United States have been for developing countries that are NPT parties. These have included projects in:

  Bangladesh
  Bolivia
  Ecuador
  Egypt
  Ghana
  Greece
  Guatemala
  Indonesia
  Kenya
  Malaysia
  Mali
  Mexico
  Morocco
  Panama
  Peru
  Philippines
  Portugal
  Romania
  Senegal
  Sudan
  Thailand
  Tunisia
  Turkey
  Uruguay
  Venezuela
  Yugoslavia
  Zaire

  In the period 1980-84, these included 111 projects involving over 300 man-months of effort by experts and more than $4.5 million for equipment. They included projects in agricultural, medical, and industrial applications; nuclear physics; chemistry and engineering; prospecting and mining; nuclear plant safety; and general atomic energy development. This program is also directed to the needs of the developing world.

- Since the 1980 Review Conference, all recipients of the annual US gifts of special nuclear material to the IAEA have been NPT parties. A total of over $600,000 has been given to the IAEA for designated NPT members since 1970. These countries include:

  Greece
  Indonesia
  Iraq
  Malaysia
  Mexico
  Morocco
  Philippines
  Romania
  Thailand
  Turkey
  Venezuela
  Yugoslavia
  Zaire

- The United States pledged to the IAEA's Technical Assistance Program a total of $21.8 million in 1980-84, as well as assistance in-kind (amounting to some $8.7 million in that time period, including the Type II fellowships) and extra-budgetary funds (amounting to $10.4 million in that period, including the Footnote A projects). Developing countries party to the Treaty have been the prime beneficiaries of the over $41 million of voluntary US technical assistance.

- NPT parties have also been the primary beneficiaries of other efforts to share US nuclear technology, expertise, and experience in this period, including:

  - PhD training from 1979-83 of over 1400 nationals from other NPT countries in nuclear physics, nuclear chemistry and nuclear engineering;

  - participation, since the 1980 Review Conference, of an estimated 700-750 foreign students from 55 different IAEA Member States, most of which were NPT parties in the Nuclear Power Course run by the Argonne National Laboratory for the IAEA;

- certification, in the period 1981-84, of 78 medical doctors from NPT countries, from all regions of the world, in nuclear medicine by the American Board of Nuclear Medicine; attendance by others at the FAO/IAEA special training course on the use of radioisotopes and radiation in entymology; and training for still others in non-power applications at the Oak Ridge National Laboratory; and

- provision to IAEA's International Nuclear Information System of approximately 100,000 abstracts, spanning the full range of peaceful nuclear technology.

o Since 1974, the US Nuclear Regulatory Commission has entered into or renewed regulatory and safety research arrangements with the following NPT parties:

Belgium
Denmark
Egypt
Finland
Germany, Federal
  Republic of
Greece
Italy
Japan
Republic of Korea
Mexico
Netherlands
Philippines
Sweden
Switzerland
United Kingdom

and has such arrangements under active negotiation with Yugoslavia.

In the same period, the NRC has entered into or renewed general research agreements or special projects with the following NPT parties: Belgium, Canada, Finland, the Federal Republic of Germany, Italy, Japan, Republic of Korea, Netherlands, Sweden, Switzerland, and the United Kingdom, as well as with Euratom.

Preference in Policy and Law

Increased US preference for NPT parties since the Treaty first came into effect in 1970 also is dramatically reflected in US policy, law, regulations, and, most importantly, in practice.

The US Atomic Energy Act, as amended by the Nuclear Non-Proliferation Act of 1978, now limits exports of fissionable materials, reactors and major reactor components to those non-nuclear weapon States that have all of their peaceful nuclear activities under IAEA safeguards. Nations that adhere to the NPT clearly meet this criterion. As a consequence, the U.S. has not denied a single license for the export of enriched uranium for power reactors to any party to the NPT. On the other hand, the US has cut off supplies of enriched uranium fuel to nations that are not NPT parties or under "full-scope" safeguards.

All new or amended Agreements for Cooperation in the peaceful uses of atomic energy entered into by the United States with non-nuclear weapon states in recent years have been with nations that are parties to the NPT or the Treaty of Tlatelolco, or both. US law precludes entering into such new or amended agreements with non-nuclear weapon states that do not accept full-scope safeguards.

To provide greater assurances of supply, the ceilings on low enriched uranium transfers under US Agreements for Cooperation have been removed by statute for NPT parties (but not non-parties). This permits the supply of additional power reactor fuel to NPT parties in keeping with the view that nations possessing credible non-proliferation credentials should enjoy assurances of reliable fuel supply.

In the crucial area of financing, the US Export-Import Bank has shown a marked preference for NPT parties in granting credits and guarantees for nuclear exports, and US laws governing participation in international financial institutions instruct the US representatives to consider, in carrying out their duties, whether the recipient is a party to the NPT.

Special preferences in the licensing of nuclear related exports have been made for NPT parties and other states having IAEA safeguards on their entire civil nuclear programs:

- expedited procedures are provided for the export to such countries of so-called nuclear-related "dual use" equipment (such as computers) and technology, and of types of nuclear components that do not require an Agreement for Cooperation;

- only such non-nuclear weapon states have been designated by the Nuclear Regulatory Commission as subject to the general license for the export of nuclear reactor components (thus eliminating the need for separate licensing of components procured at different times).

- the Nuclear Regulatory Commission has implemented revised general licenses for the export of nuclear material which have more restrictive provisions with respect to non-NPT parties.

Since 1982, special case-by-case consideration has been required under US regulations to authorize US persons or firms to engage in activities involving the transfer of unpublished, unclassified nuclear technology and know-how to non-parties to the NPT that do not have IAEA safeguards on their entire civil nuclear program; by contrast, most NPT parties and states that have such full-scope safeguards have the benefit of a general authorization that permits such technology transfer activities in a wide variety of fields ranging from mining, milling, and fuel fabrication to reactor design, construction, and operation. This regulatory aspect of US policy is regarded as of particular importance since, under the US system, private industry assumes much of the responsibility for transferring technology and engaging in cooperative activities with organizations in foreign countries.

This record reflects the continued strong US commitment to fulfilling its obligations under Article IV of the NPT. That record is consonant with the spirit and vision of the NPT that parties to the Treaty should obtain advantages not available to non-parties.

Article V

Article V of the NPT ensures that should there be any benefits of peaceful nuclear explosions, these benefits will be made available to non-nuclear weapon states on a non-discriminatory basis.

The United States has not conducted any PNE experiments since 1970, and has not had an active PNE research and development program since the mid-1970's. It is the view of the US that the technology of manufacturing PNEs is indistinguishable from that of nuclear weapons. In addition, the problems associated with potential applications of PNEs continues to outweigh their possible benefits. The US has not realized any benefits from PNEs and has not provided any such benefits pursuant to Article V.

Pursuit of Effective Measures Relating to Cessation of the Nuclear Arms Race at an Early Date and to Nuclear Disarmament

From the earliest days of the postwar era, the United States has joined the search for ways to neutralize the threat of the non-peaceful uses of the atom and safeguard world peace. The prevention of nuclear war has been the most critical of concerns. As President Reagan has stated, "in today's world the existence of nuclear weapons could mean, if not the extinction of mankind, then surely the end of civilization as we know it".

The United States remains committed to the goal of deep reductions of nuclear weapons, with a view to their eventual elimination. In our view, the means toward that goal is the negotiation and effective implementation of concrete, verifiable agreements. Only in such agreements can we achieve precision regarding undertakings, equality or equivalency of forces, and effective verifiability which are necessary if these agreements are to increase international security and stability. The issues are complex and the stakes high, but we are ready to make the commitments necessary to produce such measures.

Article VI of the NPT obligates all Treaty parties "to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control." Article VI complements the obligations with respect to horizontal proliferation assumed by the parties under Articles I and II by addressing the problem of vertical proliferation.

Consistent with Article VI, the United States since the last Review Conference has undertaken good faith negotiations in pursuit of effective measures relating to the cessation of the nuclear arms race and to nuclear disarmament. These are summarized below.

I. Nuclear Arms Control Negotiations and US Proposals

November 1981

-- President Reagan offered to forgo deployment of the US Pershing II and ground-launched cruise missile if the Soviets would eliminate their SS-20, SS-4, and SS-5 missiles (the "zero/zero" outcome). Intermediate Range Nuclear Force (INF) negotiations with the Soviets began in Geneva on November 30. The first round of talks ended March 16, 1982.

-- President Reagan proposed the opening of Strategic Arms Reduction Talks (START) in early 1982 with a goal of major reductions in all types of nuclear arms.

February 1982 -- The US tabled a draft INF Treaty in Geneva which embodied President Reagan's "zero/zero" proposal.

May 1982

-- The second round of INF negotiations began in Geneva on May 20. The round ended on July 20.

-- President Reagan again called for Strategic Arms Reduction Talks and proposed a first-phase cut of approximately one-third in strategic ballistic missile warheads for both the Soviet Union and the United States. Under terms of the proposal, each side would have no more than 5000 ballistic missile warheads of which no more than half could be on land-based ICBMs. In a second phase, the sides would reduce the total throw-weight of their ballistic missile forces below the then-current US level. The President further indicated that no aspect of the problem would be excluded from consideration, and that the US would negotiate in good faith on any topics the Soviets wished to raise.

June 1982 -- START negotiations with the Soviets began in Geneva on June 29. The US indicated its willingness to accept equal levels of heavy bombers, including the Soviet Backfire bomber, in the context of agreements that included significant reduction in Soviet missile forces. The first round of talks ended on August 12.

September 1982 -- The third round of INF negotiations began in Geneva on September 30. The round ended on November 30.

October 1982 -- The second round of START negotiations began in Geneva on October 6. The round ended on December 2.

January 1983 -- The fourth round of INF negotiations began in Geneva on January 27. In March, the US tabled a proposal for an interim agreement establishing equal global levels of US and Soviet longer-range INF missile warheads at the lowest mutually-acceptable level. The round ended on March 29.

February 1983 -- A third round of START talks began in Geneva on February 2. The round ended on March 31.

May 1983 -- At the fifth round of INF negotiations, which began in Geneva on May 17, the US tabled a draft treaty incorporating its interim agreement proposal and proposed a series of equal warhead levels between 50 and 450. The US indicated that it would consider any level of interest to the Soviets. The round ended on July 14.

June 1983 -- In preparation for the fourth round of the START talks which began in Geneva on June 8, President Reagan directed that new steps toward progress be taken in the strategic arms negotiations in order to adjust the US START position to bring it into line with the recommendations of the President's Commission on Strategic Forces (Scowcroft Commission) and to provide additional flexibility to US negotiators to explore areas of common ground with the Soviets.

The US tabled a draft treaty which:

- relaxed its proposal for reductions to an 850 deployed ballistic missile limit;
- indicated flexibility through a willingness to explore all appropriate avenues for achieving reductions in ballistic missile throw-weight;
- combined the originally proposed two-phased agreement into one, and placed all categories of strategic weapons on the table to be negotiated in a single agreement; and
- called for equal limits, below the levels set by SALT II, on the number of heavy bombers and the number of air-launched cruise missiles allowed on each bomber.

The fourth round ended on August 2.

September 1983 -- The sixth round of INF negotiations began in Geneva on September 27. In the context of reaching an agreement providing for equal global limits on longer-range INF missile warheads, the US proposed to:

- consider a commitment not to offset the entire Soviet global longer-range INF missile deployment by US

Pershing II and ground-launched cruise missile deployments in Europe. The US would retain the right, however, to deploy elsewhere to reach this global ceiling;

- be prepared to apportion reductions of both Pershing II and ground-launched cruise missiles appropriately; and

- consider proposals involving limits on specific types of US and Soviet land-based INF aircraft.

October 1983 -- The fifth round of START talks began in Geneva on October 5. The round ended on December 8. President Reagan announced just prior to the round another US START initiative, which provided for:

- tradeoffs between areas of US advantage and areas of Soviet advantage;

- a mutual guaranteed build-down of ballistic missile warheads by either 5% per year or by deeper reductions linked to modernization in a way designed to improve stability; and

- a concurrent build-down of bombers.

November 1983 -- The US proposed a global limit of 420 longer-range INF missile warheads on each side, corresponding to the approximately 420 warhead limit the Soviets proposed for themselves in Europe, while indicating readiness to discuss other equal global ceilings. The negotiations were suspended on November 23.

September 1984

-- At the UN General Assembly, President Reagan called for an overall arms control framework, or umbrella approach to nuclear negotiations to facilitate their progress. He pledged "redoubled efforts to meet the legitimate expectations of all nations" for substantial reductions in US and Soviet nuclear arsenals.

-- At the same time, President Reagan also proposed an exchange of visits to allow Soviet experts to come to the US nuclear test site and US experts to go to a Soviet nuclear test site to measure directly the yields of nuclear weapons tests. The objective would be to establish the basis for verification for effective limits on underground nuclear testing.

November 1984 -- The United States and the Soviet Union agreed to begin new negotiations on the full range of issues concerning nuclear forces, including strategic and intermediate-range nuclear weapons, and defensive and space arms.

January 1985 -- The United States and the Soviet Union met in Geneva and agreed on the subject and objectives of these new negotiations. The two sides issued the following Joint Communique at the conclusion of this meeting:

> As previously agreed, a meeting was held on January 7 and 8, 1985, in Geneva between George P. Shultz, the US Secretary of State, and Andrei A. Gromyko, member of the Politburo of the Central Committee of the C.P.S.U., first deputy chairman of the Council of Ministers of the USSR and Minister of Foreign Affairs of the USSR.
>
> During the meeting, they discussed the subject and objectives of the forthcoming US-Soviet negotiations on nuclear and space arms. The sides agree that the subject of the negotiations will be a complex of questions concerning space and nuclear arms, both strategic and intermediate range, with all the questions considered and resolved in their interrelationship. The objective of the negotiations will be to work out effective agreements

> aimed at preventing an arms race in space and terminating it on earth, at limiting and reducing nuclear arms and at strengthening strategic stability.
>
> The negotiations will be conducted by a delegation from each side, divided into three groups. The sides believe that ultimately the forthcoming negotiations, just as efforts in general to limit and reduce arms, should lead to the complete elimination of nuclear arms everywhere.
>
> The date of beginning of the new negotiations and the site of these negotiations will be agreed through diplomatic channels within one month.

March 1985 -- The first round of new US-Soviet negotiations concerning the full range of nuclear force issues began in Geneva on March 12. It ended on April 23.

May 1985 -- The second round of the new talks began on May 30. This round ended on July 16.

II. Confidence Building Measures, Proposals, and Agreements

June 1982 -- President Reagan proposed confidence building measures to reduce the risk of nuclear war by accident or miscalculation, including measures for advance notification of test launches for all intercontinental ballistic missiles, submarine-launched ballistic missiles and longer-range INF ground-launched ballistic missiles, prior notification of major military exercises, and an expanded exchange of information about nuclear forces.

May 1983 -- President Reagan endorsed four confidence building measures to:

- improve the "Hotline" between the US and USSR;
- create the bilateral Joint Military Communications link between the US National Military Command Center and its Soviet counterpart;

- establish improved links between each of the two governments and their embassies in each other's capitals; and

- facilitate consultations in the event that unauthorized individuals or groups acquire, use, or threaten to use nuclear explosive devices.

August 1983 -- The US and the USSR held preliminary discussions in Moscow pertaining to confidence building measures related to communications.

January 1984

-- The US and the USSR held a second meeting in Washington, during which substantive agreement was reached on technical aspects of the Hotline upgrade.

-- The US, in conjunction with NATO Allies, developed a package of proposed Confidence and Security Building Measures designed to reduce the risk of war, alleviate tensions and enhance stability in Europe.

April 1984 -- The US and the USSR held a third meeting on the Hotline upgrade in Moscow.

June 1984 -- President Reagan offered to enter into discussions on the Soviet proposals in the Conference on Disarmament in Europe (CDE) on non-use-of-force if the Soviets would negotiate on measures to give concrete meaning to that principle.

July 1984 -- The US and the USSR reached agreement on improving the Hotline to include addition of a high-speed facsimile capability which will permit transmission of more complex data, including full pages of text, maps, and graphs.

May 1985 -- President Reagan at Strasbourg introduced a four-part proposal for reducing military tensions:

- The US and the Soviet Union should exchange observers at military exercises and locations.
- The US and the Soviet Union should institute high-level contacts between military leaders to develop better understanding and prevent potential tragedies from occurring.
- The CDE should act promptly and agree on the concrete confidence-building measures proposed by NATO countries. The President reiterated US preparedness to discuss the Soviet proposal on non-use of force in the context of Soviet agreement to concrete confidence-building measures.
- A permanent military-to-military communications link should be established to exchange notifications and other information regarding routine military activities, which could evolve into a "risk reduction" mechanism in times of crisis.

III. Other Arms Control Measures

November 1981 -- Additional Protocol I to the Treaty for the Prohibition of Nuclear Weapons in Latin America was ratified by the United States. Under the terms of the Protocol, the US agreed to apply the denuclearization provisions of the Treaty to those territories for which the US is internationally responsible in the Latin American Nuclear Weapons Free Zone.

May 1982 -- President Reagan announced that the US would refrain from actions which undercut existing strategic arms agreements as long as the Soviets show equal restraint.

October 1983 -- Outside of the INF negotiations, NATO announced its intention to reduce the Alliance's nuclear stockpile by an additional 1400 warheads beyond the 1000 removed in 1980 in conjunction with NATO's decision on INF.

April 1984

-- At the Conference on Disarmament, the US presented a complete text of a treaty which would comprehensively ban chemical weapons and provide for the internationally monitored destruction of declared existing stocks and facilities. The US text also contained ground-breaking, mandatory inspection provisions.

-- In the Mutual and Balanced Force Reduction Negotiations, the West put forward a new proposal to break the deadlock on data.

June 1985 -- President Reagan announced that the United States would continue to refrain from undercutting existing strategic arms agreements to the extent the Soviet Union exercises comparable restraint, and provided that the Soviet Union actively pursues arms reduction agreements in the on-going Geneva talks. The US has implemented this policy by fully dismantling eight Polaris SSBNs and some Titan ICBMs as new Trident SSBNs have been deployed. And as President Reagan announced, the US will deactivate and dismantle an existing Poseidon SSBN according to agreed procedures when a new Trident submarine begins sea trials later this year.

APPENDIX 6

List of Non-Proliferation Treaty Parties

Country	Date of Signature	Date of Deposit of Ratification	Date of Deposit of Accession (A) or Successions (S)
Afghanistan	7/1/68	2/4/70 1/	
Antigua and Barbuda			6/17/85 (S)
Australia	2/27/70	1/23/73	
Austria	7/1/68	6/27/69	
Bahamas, The			8/11/76 (S)
Bangladesh			8/31/79 (A)
Barbados	7/1/68	2/21/80	
Belgium	8/20/68	5/2/75	
Belize			9/29/82 4/
Benin	7/1/68	10/31/72	
Bhutan			5/23/85 (A)
Bolivia	7/1/68	5/26/70	
Botswana	7/1/68	4/28/69	
Brunei			3/26/85 (A)
Bulgaria	7/1/68	9/5/69	
Burkina Faso	11/25/68	3/3/70	
Burundi			3/19/71 (A)
Cameroon	7/17/68	1/8/69	
Canada	7/23/68	1/8/69	
Cape Verde			10/24/79 (A)
Central African Republic			10/25/70 (A)
Chad	7/1/68	3/10/71	
Colombia	7/1/68		
Congo			10/23/78 (A)
Costa Rica	7/1/68	3/3/70	
Cyprus	7/1/68	2/10/70	
Czechoslovakia	7/1/68	7/22/69	
Denmark	7/1/68	1/3/69	
Dominica			8/10/84 (S)
Dominican Republic	7/1/68	7/24/71	
Ecuador	7/9/68	3/7/69	
Egypt	7/1/68	2/26/81 1/	
El Salvador	7/1/68	7/11/72	
Equatorial Guinea			11/1/84 (A)
Ethiopia	9/5/68	2/5/70	
Fiji			7/14/72 (S)
Finland	7/1/68	2/5/69	
Gabon			2/19/74 (A)
Gambia, The	9/4/68	5/12/75	
German Democratic Republic	7/1/68	10/31/69	
Germany, Federal Republic of	11/28/69	5/2/75 1/ 2/	
Ghana	7/1/68	5/4/70	
Greece	7/1/68	3/11/70	
Grenada			9/2/75 (S)
Guatemala	7/26/68	9/22/70	
Guinea			4/29/85 (A)
Guinea-Bissau			8/20/76 (A)
Haiti	7/1/68	6/2/70	
Holy See			2/25/71 (A) 1/
Honduras	7/1/68	5/16/73	
Hungary	7/1/68	5/27/69	
Iceland	7/1/68	7/18/69	
Indonesia	3/2/70	7/12/79 1/	
Iran	7/1/68	2/2/70	
Iraq	7/1/68	10/29/69	
Ireland	7/1/68	7/1/68	
Italy	1/28/69	5/2/75 1/	
Ivory Coast	7/1/68	3/6/73	
Jamaica	4/14/69	3/5/70	
Japan	2/3/70	6/8/76 1/	
Jordan	7/10/68	2/11/70	
Kampuchea			6/2/72 (A)
Kenya	7/1/68	6/11/70	
Kiribati			4/18/85 (S)
Korea, Republic of	7/1/68	4/23/75	
Kuwait	8/15/68		
Laos	7/1/68	2/20/70	

Country	Date of Signature	Date of Deposit of Ratification	Date of Deposit of Accession (A) or Succession (S)
Lebanon	7/1/68	7/15/70	
Lesotho	7/9/68	5/20/70	
Liberia	7/1/68	3/5/70	
Libya	7/18/68	5/26/75	
Liechtenstein			4/20/78 (A) _1/
Luxembourg	8/14/68	5/2/75	
Madagascar	8/22/68	10/8/70	
Malaysia	7/1/68	3/5/70	
Maldives	9/11/68	4/7/70	
Mali	7/14/69	2/10/70	
Malta	4/17/69	2/6/70	
Mauritius	7/1/68	4/8/69	
Mexico	7/26/68	1/21/69 _1/	
Mongolia	7/1/68	5/14/69	
Morocco	7/1/68	11/27/70	
Nauru			6/7/82 (A)
Nepal	7/1/68	1/5/70	
Netherlands	8/20/68	5/2/75 _3/	
New Zealand	7/1/68	9/10/69	
Nicaragua	7/1/68	3/6/73	
Nigeria	7/1/68	9/27/68	
Norway	7/1/68	2/5/69	
Panama	7/1/68	1/13/77	
Papua New Guinea			1/13/82 (A)
Paraguay	7/1/68	2/4/70	
Peru	7/1/68	3/3/70	
Philippines	7/1/68	10/5/72	
Poland	7/1/68	6/12/69	
Portugal			12/15/77 (A)
Romania	7/1/68	2/4/70	
Rwanda			5/20/75 (A)
San Marino	7/1/68	08/10/70	
Sao Tome and Principe			7/20/83 (A)
St. Lucia			12/28/79 (S)
St. Christopher and Nevis			11/2/83 _4/
St. Vincent and the Grenadines			11/6/84 (S)
Senegal	7/1/68	12/17/70	
Seychelles			4/8/85 (A)
Sierra Leone			2/26/75 (A)
Singapore	2/5/70	3/10/76	
Solomon Islands			6/17/81 (S)
Somalia	7/1/68	3/5/70	
Sri Lanka	7/1/68	3/5/79	
Sudan	12/24/68	10/31/73	
Suriname			6/30/76 (S)
Swaziland	6/24/69	12/11/69	
Sweden	8/19/68	1/9/70	
Switzerland	11/27/69	3/9/77 _1/	
Syrian Arab Republic	7/1/68	9/24/69 _1/	
Thailand			12/2/72 (A)
Togo	7/1/68	2/26/70	
Tonga			7/7/71 (S)
Trinidad and Tobago	8/20/68		
Tunisia	7/1/68	2/26/70	
Turkey	1/28/69	4/17/80 _1/	
Tuvalu			1/19/79 (S)
Uganda			10/20/82 (A)
Union of Soviet Socialist Republics	7/1/68	3/5/70	
United Kingdom	7/1/68	11/27/68 _5/	
United States	7/1/68	3/5/70	
Uruguay	7/1/68	8/31/70	
Venezuela	7/1/68	9/25/75	
Vietnam, Socialist Republic of			6/14/82 (A)
Western Samoa			3/17/75 (A)
Yemen Arab Republic (Sana)	9/23/68		

Country	Date of Signature	Date of Deposit of Ratification	Date of Deposit of Accession (A) or Succession (S)
Yemen, People's Democratic Republic of (Aden)	11/14/68	6/1/79	
Yugoslavia	7/10/68	3/4/70 1/	
Zaire	7/22/68	8/4/70	
Taiwan 6/	7/1/68	1/27/70 6/	

Dates given are the earliest dates on which a country signed the Treaty or deposited its instrument of ratification or accession — whether in Washington, London, or Moscow. In the case of a country that was a dependent territory which became a party through succession, the date given is the date on which the country gave notice that it would continue to be bound by the terms of the Treaty.

1 With Statement.

2 Applicable to Berlin (West).

3 Extended to Netherlands Antilles.

4 Date of general declaration to the Secretary General of the UN concerning continuing treaty obligations applicable prior to independence. The United States considers each of these countries bound by the obligations in the treaty in accordance with its general declaration, but not a party pending deposit of an instrument of succession or accession.

5 Extended to Anguilla and territories under the territorial sovereignty of the United Kingdom.

On January 27, 1970, an instrument of ratification was deposited in the name of the Republic of China. Effective January 1, 1979, the United States recognized the People's Republic of China as the sole legal government of China. The authorities on Taiwan state that they will continue to abide by the provisions of the Treaty and the United States regards them as bound by its obligations.